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ADA COMPILER VALIDATION SUMMARY REPORT: UNIVERSITY OF
KARLSRUHE-GND/GERMA. (U)

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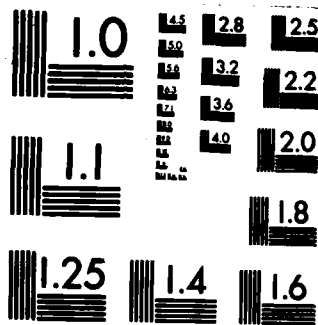
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REPORT DOCUMENTATION PAGE

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Ada Compiler Validation Summary Report (Draft):
System/German Mod VAX11 Compiler,
Version V1.0
For VAX-11/750,
Using VMS 3.0

12 NOV 84

Prepared By

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This report has been reviewed and is approved.

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ABSTRACT

The purpose of this Validation Summary Report (VSR) is to present the results and conclusions of performing standardized tests of the System/German MOD compiler. On-site testing was performed 28 SEP 84 to 6 OCT 84 at System KG in Karlsruhe, Germany under the auspices of the Ada Validation Facility (AVF), according to the Ada Validation Office (AVO) policies and procedures. The System compiler (VAX11 Version 1.0) is hosted on the Center's VAX-11/750 computer operating under VMS 3.0. The suite of tests known as the Ada Compiler Validation Capability (ACVC), Version 1.4, was used. The ACVC suite of tests is used to validate conformance of the compiler to ANSI/MIL-STD-1815A (Ada). This standard is described in the ANSI Ada Reference Manual, February 1983. Not all tests in the ACVC test suite are applicable to a specific implementation. Also, known test errors in Version 1.4 are present in some tests; these tests were withdrawn. The purpose of the testing is to ensure that the compiler properly implements legal language constructs and that it identify, reject from processing, and label illegal language constructs. The testing also identifies implementation-dependent behavior permitted by the standard. Six classes of tests are used. These tests are designed to perform checks at compile time, during execution, and at link time. The ACVC, Version 1.4, contains 2178 tests, of which 1928 were applicable to this implementation. Of the 1928 applicable tests, 75 were withdrawn due to the occurrence of errors in the tests. Results showed that all of the remaining 1853 valid tests were successfully passed by the System compiler. No nonconformances to the Ada standard were detected. A complete list of tests and results is provided in this report. The AVF concluded that the results obtained show acceptable compliance to the February 1983 ANSI Ada Reference Manual.

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1. Introduction

1.1. Purpose of the Validation Summary Report

This report describes the results of the validation effort for the following Ada translator:

Host Machine: VAX-11/750
Operating System: VMS 3.0
Host Disk System: 2xSi9784, 2xSi9751; 1xSi9784, 1xSi9751
Target Machine: VAX-11/750
Operating System: VMS 3.0
Language Version: ANSI/MIL-STD-1815A Ada
Translator Name: VAX11
Translator Version: V1.0
Validator Version: 1.4

Testing of this translator was conducted by IABG-AVF under the observation of AVF-WPAFB, at the direction of the Ada Joint Program Office (AJPO). Testing was conducted from 28 SEP 84 through 6 OCT 84 at Systeam KG in Karlsruhe, Germany in accordance with Ada Validation Office (AVO) policies and procedures.

The purpose of this report is to document the results of the testing performed on the compiler. Testing was carried out with specific emphasis on the following factors:

- . to identify any language constructs supported by the translator that do not conform to the Ada standard
- . to identify any unsupported language constructs required by the Ada standard
- . to describe implementation-dependent behavior allowed by the standard

1.2. Use of the Validation Summary Report

The Ada Validation Office may make full and free public disclosure of this report in accordance with the "Freedom of Information Act" (5 U.S.C. #552). The results of the

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validation are only for the purpose of satisfying United States Government requirements and apply only to the computers, operating systems, and compiler version identified in this report.

The Ada Compiler Validation Capability is used to determine, insofar as is practical, the degree to which the subject compiler conforms to the Ada standard. Thus, this report is necessarily discretionary and judgmental. The United States Government does not represent or warrant that the statements, or any one of them, set forth in this report are accurate or complete, nor that the subject compiler has no other nonconformances to the Ada standard. This report is not meant to be used for the purpose of publicizing the findings summarized therein.

Questions regarding this report or the validation tests should be sent to:

IABG-AVF
Dept. SZT
Einsteinstraße
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Federal Republic of Germany

1.3. References

Reference Manual for the Ada Programming Language, ANSI/MIL-STD-1815A, February 1983.

Ada Validation Organization: Policies and Procedures, Mitre Corporation, June 1982, PB 83-110601.

Ada Compiler Validation Implementors' Guide, SofTech, Inc., October 1980.

"The Ada Compiler Validation Capability," Computer, Vol. 14, No. 6, June 1981.

Using the ACVC Tests, SofTech, Inc., February 1984.

1.4. Definitions of Terms

Class A tests are passed if no errors are detected at compile time. Although these tests are constructed to be executable, no checks can be performed at run time to see if the test objective has been met; this distinguishes Class A from Class C tests. For example, a Class A test might check that keywords of other languages (other than those already reserved in Ada) are not treated as reserved words by an Ada

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implementation.

Class B tests are illegal programs. They are passed if all the errors they contain are detected at compile time (or link time) and no legal statements are considered illegal by the compiler.

Class C tests consist of executable self-checking programs. They are passed if they complete execution and do not report failure.

Class D tests are capacity tests. Since there are no firm criteria for the number of identifiers permitted in a compilation, number of units in a library, etc., a compiler may refuse to compile a class D test. However, if such a test is successfully compiled, it should execute without reporting a failure.

Class E tests provide information about an implementation's interpretation of the Standard. Each test has its own pass/fail criterion.

Class L tests consist of illegal programs whose errors cannot be detected until link time. They are passed if errors are detected prior to beginning execution of the main program.

CUSTOMER: The agency requesting the validation (Systeam/German MoD).

HOST: The computer on which the compiler executes (VAX-11/750).

ACVC: The Ada Compiler Validation Capability.

AVO: The Ada Validation Office. In the context of this report, the AVO is responsible for setting policies and procedures for compiler validations.

AVF: The Ada Validation Facility, IABG-AVF, Ottobrunn/West Germany. In the context of this report, the AVF is responsible for conducting compiler validations.

TARGET: The computer for which a compiler generates object code (VAX-11/750).

VALIDATION: The process of validating a compiler. The term is used interchangeably with test or compiler test.

VALIDATION TESTS: The generic form used to refer to a set of test programs which evaluate how closely a compiler conforms to its language specification. In this report, the term will be used (unqualified) to mean the ACVC tests.

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2. Test Analysis

The following table shows that Systeam/German Mod's VAX11 compiler passed all applicable correct tests.

	A	B	C	D	E	L	Total
Processed	58	784	1255	14	7	60	2178
Inapplicable	0	9	227	0	0	14	250
Withdrawn	1	3	71	0	0	0	75
Passed	57	772	957	14	7	46	1853
Failed	0	0	0	0	0	0	0

250 tests in the suite were processed but were found to be not applicable to the VAX11 translator (see section 4.2.6).

In addition, 75 tests were withdrawn from the test suite because they did not conform to ANSI/MIL-STD-1815A, the Ada Language Standard (see section 4.2.6 for details).

2.1. Class A Testing

Class A tests check to ensure that legal Ada programs can be successfully compiled. These tests are executed but contain no executable self-checking capabilities. There were 58 class A test programs processed in this validation.

2.1.1. Class A Test Procedures

Each class A test is separately compiled and executed. However, the only purpose of execution is to produce a message indicating that the test passed.

2.1.2. Class A Test Results

Successful compilation and execution without any error messages indicates that the tests passed. There was one class A test that was withdrawn because of errors in the test, and no class A test was found to be inapplicable to this implementation. One test (AE2101A) crashed at compile time because of capacity problems. After splitting, the test passed. All 57 applicable class A tests passed.

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2.2. Class B Testing

Class B tests check the ability to recognize illegal language usage. 784 class B tests were processed.

2.2.1. Class B Test Procedures

Each class B test is separately compiled. The resulting test compilation listings are manually examined to see whether every illegal construct in the test is detected. If all errors are not detected, a version of the test is created that contains only undetected constructs. This "split" version is recompiled and the results analyzed. If all errors are still not detected, the revision process is repeated until a revised test contains only a single illegal construct.

A class B test is considered to fail only if a version of the test containing a single illegal construct is accepted by the compiler (i.e., an illegal construct is not detected) or a version containing no errors is rejected (i.e., a legal construct is rejected).

2.2.2. Class B Test Results

784 class B tests were presented to the compiler. Nine of these tests were found to be inapplicable to this implementation (see section 4.2.6); three tests were found to be incorrect (i.e., a conforming compiler would have failed each of these tests - see section 4.2.5). All 772 remaining class B tests passed.

Because all errors were not detected when compiling the original tests, the following 5 tests were modified by removing the detected errors:

B29001A-B.ADA
B37301A.ADA
BC3204C1M-B.ADA
BC3204D-B.ADA
BC3205D1M-B.ADA

For the modified tests, all illegal constructs were detected.

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2.3. Class C Testing

Class C tests check to ensure that legal Ada programs are correctly compiled and executed by an implementation. 1255 class C tests were processed in this validation.

2.3.1. Class C Test Procedures

Each Class C test is separately compiled and executed. The tests are self-checking and produce PASS/FAIL messages. Any "failed" tests are individually checked to see if they are correct and if they are applicable to the implementation. Any tests that are inapplicable or that do not conform to the Ada Standard are withdrawn.

2.3.2. Class C Test Results

All class C tests were processed except those tests requiring a floating point precision exceeding SYSTEM.MAX_DIGITS (181) and those tests in which the source line was too long (22).

1255 class C tests were processed. 71 tests were withdrawn because of errors in the tests; in addition, 227 tests were found to be inapplicable to this implementation. The remaining 957 tests passed.

Because of default storage allocation, the following 19 tests were modified by insertion of a length clause (see Attm. 1 for justification):

C910BAA-B.ADA
C93001A-B.ADA
C93002A-B.ADA
C93003A-B.ADA
C94001A-B.ADA
C94002A-B.ADA
C94002B-B.ADA
C94003A-B.ADA
C94005B-B.ADA
C94006A-B.ADA
C94007A-B.ADA
C94007B-B.ADA
C940ABA-B.ADA
C940ACA-B.ADA
C940AIA-B.ADA
C95021A-B.ADA
C9A005A-B.ADA
C9A006A-B.ADA
C9A007A-B.ADA

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All modified tests passed.

2.4. Class D Testing

Class D tests are executable tests used to check an implementation's compilation and execution capacities. Fourteen class D tests were used in this validation.

2.4.1. Class D Test Procedures

Each class D test is separately compiled and executed. The tests are self-checking and produce PASS/FAIL messages.

2.4.2. Class D Test Results

All fourteen applicable class D tests passed. See section 4.2.7 for further information.

2.5. Class E Testing

Class E tests are executable tests that provide information about an implementation's interpretation of the Standard in areas where it permits implementations to differ. Each test has its own pass/fail criterion. Seven class E tests were used in this validation.

2.5.1. Class E Test Procedures

Each class E test is separately compiled and executed. The tests are self-checking and produce commentary and PASS/FAIL messages.

2.5.2. Class E Test Results

All seven applicable class E tests passed. See section 4.2.7 for further information.

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2.6. Class L Testing

Class L tests check to ensure that incomplete or illegal Ada programs involving multiple separately compiled source files are detected at link time and are not allowed to execute. Sixty test programs were processed in this validation attempt.

2.6.1. Class L Test Procedures

Each class L test is separately compiled, and execution is attempted. The tests produce FAIL messages if executed. Any "failed" tests are individually checked to see if they are correct and if they are applicable to the implementation. Any tests that are inapplicable or that do not conform to the Ada standard are withdrawn.

2.6.2. Class L Test Results

Of the 60 class L tests, 14 were found to be inapplicable to this implementation (see section 4.2.6), and none were withdrawn due to errors in the tests (see section 4.2.5). The remaining 46 tests passed.

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3. Compiler Nonconformances

There were no nonconformances to the Ada Standard detected in this validation. The compiler passed all applicable correct tests.

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4. Additional Information

This section describes in more detail how the validation was conducted.

4.1. Compiler Parameters

Certain tests do not apply to all Ada compilers, e.g., compilers are not required to support several predefined floating point types. Therefore tests must be selected based on the predefined types an implementation actually supports. In addition, some tests are parameterized according to the maximum input source line length allowed by an implementation, the maximum floating point precision supported, etc. The implementation-dependent parameters used in performing this validation were:

- . maximum lexical element length: 78
- . maximum digits value for floating point types: 9
- . SYSTEM.MIN_INT: -2147483648
- . SYSTEM.MAX_INT: 2147483647
- . predefined numeric types: INTEGER, FLOAT
- . INTEGER'FIRST: -2147483648
- . INTEGER'LAST: 2147483647
- . source character set: ASCII
- . extended ASCII characters:
" a..z | \$ % ? @ [\] ^ _ { } ~ "
- . non-ascii char type: (NON_NULL)
- . TEXT_IO.COUNT'LAST: 2147483647
- . TEXT_IO.FIELD'LAST: 255
- . illegal external file name1: NO_VMS.FIL
- . illegal external file name2: MUCHTOOLONGNAMEFORAFILE
- . SYSTEM.PRIORITY'FIRST: 0
- . SYSTEM.PRIORITY'LAST: 255

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4.2. Testing Information

Tests were compiled/executed at the offices of Systeam KG in Karlsruhe, Germany. The tests were executed on a VAX-11/750 using command procedures prepared by Systeam KG and reviewed by the validation team.

4.2.1. Pre-Test Procedures

Prior to traveling to Karlsruhe (Germany) to run the validation suite, the validation team performed a pre-validation review of the Systeam/German MoD VAX11 compiler. The validation team received from Systeam a listing containing the ACVC 1.4 pre-release test results of the Systeam VAX11 compiler. The validation team examined the test results from each test.

During testing, it was discovered that some tests, e.g. C940AIA, BC3205C, CE2401D, were significantly changed from the pre-release (we got from AVO and which was the base of the pre-validation) to the final release without appropriate notification.

Prior to testing, appropriate values for the compiler-dependent parameters were determined. These values were used to adapt tests that depend on the values. A magnetic tape containing the adapted tests was prepared and brought to the testing site.

4.2.2. Control Files

Systeam KG provided command procedures that compiled and executed tests automatically.

4.2.3. Test Procedures

A blocked format tape, brought by the validation team, was used to load the ACVC tests to disk on two VAX-11/750. The tests were loaded into 2 user accounts 1 file per test sequence to facilitate the test execution.

The package REPORT and procedure CHECK_FILE were compiled, and the corresponding library files were saved. The tests checking the REPORT package and CHECK_FILE procedure were then executed. The class B tests were then executed in chapter order followed by the class L tests. The remaining tests were then executed using two batch queues. The class B and C tests requiring splits or modifications were

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generated and submitted as single jobs. The results for each test were checked manually by the validation team. The results were saved on disk and also saved in VAX BACKUP format on magnetic tape.

4.2.4. Test Analysis Procedures

On completion of testing, all results were analyzed for failed class A, C, D, E, or L programs, and all class B compilation results were individually analyzed. Analysis procedures are described for each test class in chapter 2.

Tests found to contain errors were withdrawn.

4.2.5. Description of Errors in Withdrawn Tests

The following tests in Version 1.4 of the ACVC did not conform to the ANSI Ada standard and were withdrawn for the reasons given below:

- . C37011A-B: Sliding of array bounds is not permitted for the default initialization of array components of record objects. (CONSTRAINT_ERROR should be raised.)
- . C38104A-B: An incomplete type with discriminants was constrained before its full declaration occurred. An implementation is allowed to reject such subtype indications because of an ambiguity in the language.
- . C42005A-B: See Attm. 2.
- . C43206A-B: See Attm. 2.
- . B43201B-B: The OTHERS choice in the component association at line 66 is an error because the corresponding index constraint is not static.
- . B43203B-B: The aggregate in the last line is valid because the enclosing aggregate is not multidimensional. Therefore the last sentence of 4.3.2(8) in the Ada Reference Manual does not apply.

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- . C45321A,B,...Y-B: The (model) interval used in the test of C (lines 151-152) is too narrow.
- . C45521A,B,...Z-B: The (model) interval used in the test of C (lines 181-182) is too narrow.
- . C52001B-AB: The number 23.4 used in lines 28 and 33 is neither a model number of the float subtype FL nor the anonymous type derived in line 15 (LRM 3.5.7()). A model number should have been used instead of 23.4 (e.g. 23.5).
- . C52007A-B: In line 76, INTEGER'LAST is compared with SYSTEM.MAX INT without allowing (by a special exception handler) the implicit conversion of SYSTEM.MAX INT to INTEGER (before comparison) to raise NUMERIC ERROR. This is an unintended omission in the test program. Line 136 may also (correctly) raise NUMERIC ERROR when trying to implicitly convert W_LIT to INTEGER.
- . C52102A-AB, C52102B-AB: The result of concatenating slices of an array of characters had an upper bound that did not belong to the array's index subtype because the array was declared to have an index subtype 1..10 instead of subtype INTEGER.
- . C52103X-B: The slice assignment in lines 125 to 127 may raise NUMERIC ERROR in the evaluation of the slices or the length test, prior to assignment. eck performed in lines 147 to 173 may fail because no values ignored to the four elements of ARR42 that are tested. The check in lines 147 to 173 should be performed only if no exceptions are raised during the slice assignment of the lines 125 to 127.
- . C52104G-AB, C52104Q-AB: The elaboration of the null string in the expression

ARRX31 /= ""

at line 61 will raise CONSTRAINT ERROR because the lower bound of that string is INTEGER'FIRST.
- . A85007D-B: See Attm. 2.

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- . C87B04A-B: An overloaded function call for the function "+" was ambiguous.
- . C87B10A-B: Literal values were used that were outside an integer base type for some implementations.
- . C87B26B-B: 'STORAGE SIZE cannot be applied to a variable having an access type, even if the designated object is a task.
- . C87B31A-B: A parameterless function returning an enumeration type cannot be declared in the same declarative part with the enumeration type if the function has the same identifier as one of the enumeration values.
- . C910AHA-B: The NATURAL variable SPYNUMB is increased from 0 up to 123456 (see line 38). This number may be larger than NATURAL'LAST (= INTEGER'LAST) in some implementations.
- . C95008A: It was possible for an entry call to call a terminated task, depending on the implementation.
- . C95009A: An unintended race condition in a tasking test allowed a null access v value to be dereferenced before the access variable was assigned the access value of an allocated task.
- . B950BAA-B: A formal parameter part of an accept statement did not conform to the entry specification ("IN" was indicated explicitly in just the accept statement.)
- . CE3103A-B: The exception handler in lines 87 to 89 does not reflect that exception INCOMPLETE is raised by inner exception handlers for USE_ERROR. These exceptions will be handled by the OTHERS choice (incorrectly) resulting in "failed". An additional exception handler "WHEN INCOMPLETE => RAISE;" should be added before line 88.

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4.2.6. Description of Inapplicable Tests

181 tests were not processed because SYSTEM.MAX_DIGITS is 9. These tests were:

C35705F,G,...,Y-B	C35708F,G,...,Y-B	C45421F,G,...,Y-B
C35706F,G,...,Y-B	C35802F,G,...,Y-B	C45424F,G,...,Y-B
C35707F,G,...,Y-B	C45241F,G,...,Y-B	C45621F,G,...,Z-B

22 tests (C24113D,E,...,Y-B) were not processed because source lines were too long.

17 tests were inapplicable because the implementation does not support SHORT_INTEGER, LONG_INTEGER, other INTEGER types, SHORT_FLOAT, or LONG_FLOAT:

SHORT_INTEGER	C34001D-B, B52004E-AB, B55B09D-AB, C55B07B-AB, B86001CR-AB
---------------	---

LONG_INTEGER	C34001E-B, B52004D-AB, B55B09C-AB, C55B07A-AB, B86001CS-AB
--------------	---

other INTEGER types B86001DT-AB

SHORT_FLOAT	C34001F-B, C35702A-AB, B86001CP-AB
-------------	------------------------------------

LONG_FLOAT	C34001G-B, C35702B-AB, B86001CQ-AB
------------	------------------------------------

C86001E-B is inapplicable because package SYSTEM is used by package TEXT_IO.

LA3004A0,1,...,6M-AB and LA3004B0,1,...,6M-B are inapplicable because pragma INLINE is not supported.

CE2102D-B, CE2102E-B, CE2102F-B, and CE2102G-B are inapplicable because the implementation does support modes IN_FILE, OUT_FILE, and INOUT_FILE, and also the procedures RESET and DELETE.

CE2107A, CE2107B, CE2107C, CE2107D, CE2107E, CE2110B, CE2111D, CE3111B, CE3111C, CE3114B, and CE3115A are inapplicable because only one internal file can be associated with an external file.

4.2.7. Information Derived from the Tests

Processing of the following tests indicated support as described below for a variety of implementation options examined by the tests.

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- . B22001(A,B,C,D,E,F,G,I,J,K,L,M,N)-AB.TST and B23003(D,E,F)-AB.TST: These tests contain maximum length input lines that may exceed the printer's line length. In this validation, these tests showed that the printer has more columns than required to hold the maximum length input line.
- . E24101A-B.TST: If a based integer literal has a value exceeding SYSTEM.MAX_INT, an implementation may either reject the compilation unit at compile time or raise NUMERIC_ERROR at run-time. (Raising NUMERIC_ERROR at run-time is preferred, since it makes programs compilable for a wider variety of implementations and the numeric literal might occur in an unexecutable portion of code.) This test showed that the System VAX11 compiler raised NUMERIC_ERROR at run-time.
- . B26005A.ADA: This test contains all the ASCII control characters in string literals. All occurrences were identified with a diagnostic message by the System VAX11 compiler.
- . D29002K-B.ADA: This test declares 713 identifiers and was passed by the System VAX11 compiler.
- . E36202A-B.ADA and E36202B-B.ADA: These tests declare multidimensional null BOOLEAN arrays in which 'LENGTH of one dimension exceeds INTEGER'LAST and SYSTEM.MAX_INT, respectively. An implementation can accept this, or it can raise NUMERIC_ERROR or STORAGE_ERROR at run-time. The System VAX11 compiler did accept the declarations and raised NUMERIC_ERROR during execution.
- . D4A002A-AB.ADA, D4A002B.ADA, D4A004A-AB.ADA, and D4A004B.ADA: These tests contain universal integer calculations requiring 32 and 64 bits of accuracy, i.e., values that exceed SYSTEM.MAX_INT are used. An implementation is allowed to reject programs requiring such calculations. The System VAX11 compiler passed these four tests.
- . E43211B-B.ADA: If a bound in a non-null range of a non-null aggregate does not belong to an index subtype then all choices are evaluated before CONSTRAINT_ERROR is raised.
- . E43212B-B.ADA: All choices are evaluated before subaggregates are checked for identical bounds.
- . E52103Y-B.ADA, C52104X-B.ADA, C52104Y-B.ADA: These tests declare BOOLEAN arrays with INTEGER'LAST+3 components. An implementation may raise NUMERIC_ERROR at the type declaration or STORAGE_ERROR when array

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objects of these types are declared, or it may accept the type and object declarations. The System VAX11 compiler raised `NUMERIC_ERROR` when the type was declared in `C52104X-B` and `C52104Y-B`, but it did not raise `NUMERIC_ERROR` for null array with one dimension of length greater than `INTEGER'LAST` in `E52103Y-B`.

- . A series of tests (`D55A03*-AB.ADA`) checks to see what level of loop nesting is allowed by an implementation. Tests containing 65 or fewer nested loops passed without exceeding the implementation's capacity.
- . `D56001B-AB.ADA` contains blocks nested 65 levels deep. This test was passed.
- . `B91001G-B.ADA` and `BC1002A-B.ADA`: The System VAX11 compiler rejects the `'SMALL` length clause because it is illegal.
- . `C94004A-B.ADA`: This test checks to see what happens when a library unit initiates a task and a main program terminates without ensuring that the library unit's task is terminated. An implementation is allowed to terminate the library unit task or it is allowed to leave the task in execution. This test showed that such library tasks do terminate when the main program terminates.
- . `CA1012A4M-B.DEP`: This test checks whether an implementation requires generic library unit bodies to be compiled in the same compilation as the generic declaration. The System VAX11 compiler does allow generic declarations and bodies to be compiled in completely separate compilations.
- . `BC1002A-B.ADA`: The System VAX11 compiler rejects the enumeration representation clause because it is illegal.
- . `BC3204C*-B.ADA` and `BC3205D*-B.ADA`: These tests contain a separately compiled generic declaration, some instantiations, and a body. An implementation must reject either the instantiations or the body. The System VAX11 compiler generated an error when compiling the generic package body.
- . `CE2106A-B.DEP` and `CE3110A-B.DEP`: These tests confirmed that dynamic creation and deletion of files is supported.
- . `CE2210A-B.ADA`: This test confirmed that dynamic creation and resetting of files is supported.

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- . EE3102C-B.ADA: This test confirmed that an Ada program can open an existing file in OUT_FILE mode, and can create an existing file in either OUT_FILE or IN_FILE mode.
- . CE3111A-B.DEP showed that two internal files may read the same external file.
- . CE3111B-B.DEP and CE3111C-B.DEP showed that the System VAX11 compiler does not allow two internal TEXT IO files to be associated with the same external file when one or both internal files are opened for writing.

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5. Summary and Conclusions

The Ada Validation Office identified 2178 tests of the ACVC Version 1.4 as being potentially applicable to the validation of the Systeam/German MoD compiler hosted on the VAX-11/750. Of these, 75 were withdrawn due to test errors, and 250 were determined to be inapplicable after they were processed. The compiler passed the remaining 1853 tests.

The AVF considers these results to show acceptable compliance to the February 1983 ANSI Ada Reference Manual.

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A. Complete List of Tests and Results

This Appendix gives a complete list of the ACVC test files used in the validation attempt, in order by ACVC Implementors' Guide (Ada Reference Manual) section and objective.

To obtain more information about a test itself, the test name indicates the class of the test and which test objective in the ACVC Implementors' Guide applies to the test. The name is interpreted as follows, where the first column below indicates the character position in the name and the second column, the meaning of that position:

- 1 Class of test (A, B, C, D, E, L).
- 2 Implementors' Guide Chapter number (in hexadecimal).
- 3 Implementors' Guide Section number within a Chapter (in hexadecimal).
- 4 Implementors' Guide Subsection number or letter.
- 5, 6 Implementors' Guide Test Objective number (two-digit decimal number).
- 7 Test sequence letter (A-Z).
- 8 Compilation sequence digit or letter (0-9,A-Z).
- 9 When there are several compilation units, "M" indicates the main program.

Characters 8 and 9 are only present for tests that consist of several separately compiled units. The eighth character indicates the order in which the units are to be compiled (unit 0 is compiled first). The ninth character is only present for the main program and is always "M".

The suffix "-AB" means the test is valid for both the ANSI Ada Standard and the version of Ada published in July 1980. The suffix "-B" implies the test is only valid for the ANSI Standard. Tests without a suffix are considered to be applicable to both the ANSI Standard and the July 1980 version.

A file name ending with .TST means the test depends on one or more of the implementation-dependent parameters listed in section 4.1. A file name ending with .DEP means the test is not necessarily applicable to all implementations.

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The result for each file is also given, where:

P = passed.
 F = failed.
 N/A= not applicable to this implementation.
 W = withdrawn due to test errors.

The results for each test file were as follows:

Package REPORT and Supporting Tests

REPORT_SPEC-AB.ADA	P
REPORT_BODY-B.ADA	P
CHECK_FILE-B.ADA	P
VAR_STRINGS_SPEC.ADA	P
VAR_STRINGS_BODY.ADA	P
CZ1101A-AB.ADA	P
CZ1102A-AB.ADA	P
CZ1103A-B.ADA	P
CZ1201A-AB.ADA	P
CZ1201B-AB.ADA	P
CZ1201C-AB.ADA	P
CZ1201D-AB.ADA	P

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CHAPTER 2 TEST RESULTS

A21001A.ADA	P	A22002A.ADA	P
A26004A.TST	P	A29002A-B.ADA	P
A29002B-B.ADA	P	A29002C-B.ADA	P
A29002D-B.ADA	P	A29002E-B.ADA	P
A29002F-B.ADA	P	A29002G-B.ADA	P
A29002H-B.ADA	P	A29002I-B.ADA	P
A29002J-B.ADA	P	B22001A-AB.TST	P
B22001B-AB.TST	P	B22001C-AB.TST	P
B22001D-AB.TST	P	B22001E-AB.TST	P
B22001F-AB.TST	P	B22001G-AB.TST	P
B22001H-AB.TST	P	B22001I-AB.TST	P
B22001J-AB.TST	P	B22001K-AB.TST	P
B22001L-AB.TST	P	B22001M-AB.TST	P
B22001N-AB.TST	P	B22003A.ADA	P
B22004A.ADA	P	B22004B.ADA	P
B22004C.ADA	P	B23002A.ADA	P
B23003D-AB.TST	P	B23003E-AB.TST	P
B23003F-AB.TST	P	B23004A.ADA	P
B23004B.ADA	P	B24001A.ADA	P
B24001B.ADA	P	B24001C.ADA	P
B24005A.ADA	P	B24005B.ADA	P
B24104A.ADA	P	B24104B.ADA	P
B24104C.ADA	P	B26002A.ADA	P
B26005A.ADA	P	B29001A-B.ADA	P
C23001A.ADA	P	C23003A.TST	P
C24002A.ADA	P	C24002B.ADA	P
C24002C.ADA	P	C24003A.TST	P
C24003B.TST	P	C24003C.TST	P
C24102A.ADA	P	C24102B.ADA	P
C24102C.ADA	P	C24103A.ADA	P
C24113A-B.DEP	P	C24113B-B.DEP	P
C24113C-B.DEP	P	C24113D-B.DEP	N/A
C24113E-B.DEP	N/A	C24113F-B.DEP	N/A
C24113G-B.DEP	N/A	C24113H-B.DEP	N/A
C24113I-B.DEP	N/A	C24113J-B.DEP	N/A
C24113K-B.DEP	N/A	C24113L-B.DEP	N/A
C24113M-B.DEP	N/A	C24113N-B.DEP	N/A
C24113O-B.DEP	N/A	C24113P-B.DEP	N/A
C24113Q-B.DEP	N/A	C24113R-B.DEP	N/A
C24113S-B.DEP	N/A	C24113T-B.DEP	N/A
C24113U-B.DEP	N/A	C24113V-B.DEP	N/A
C24113W-B.DEP	N/A	C24113X-B.DEP	N/A
C24113Y-B.DEP	N/A	C26002B.ADA	P
C26006A-AB.ADA	P	C26008A-AB.ADA	P
C27001A-AB.ADA	P	C27002A-B.ADA	P
D29002K-B.ADA	P	E24101A-B.TST	P

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CHAPTER 3 TEST RESULTS

A32203B-B.ADA	P	A32203C-B.ADA	P
A32203D-B.ADA	P	A34008B-B.ADA	P
A38106D-B.ADA	P	A38106E-B.ADA	P
B32103A-AB.ADA	P	B32106A-B.ADA	P
B32201A-B.ADA	P	B32202A-B.ADA	P
B32202B-B.ADA	P	B32202C-B.ADA	P
B33001A.ADA	P	B33002A.ADA	P
B33003A.ADA	P	B33003B-AB.ADA	P
B33003C-AB.ADA	P	B33004A.ADA	P
B34001S-AB.ADA	P	B34008A-B.ADA	P
B35101A.ADA	P	B35301A.ADA	P
B35501A.ADA	P	B35506A.ADA	P
B35506B.ADA	P	B35701A.TST	P
B35709A.ADA	P	B35A03A-B.ADA	P
B36101A-AB.ADA	P	B36102A.ADA	P
B36103A.ADA	P	B36105A-B.ADA	P
B36171A-B.ADA	P	B36171B-B.ADA	P
B36171C-AB.ADA	P	B36171D-AB.ADA	P
B36171E-AB.ADA	P	B36171F-AB.ADA	P
B36171G-AB.ADA	P	B36171H-AB.ADA	P
B36171I-AB.ADA	P	B36201A-B.ADA	P
B37003A-AB.ADA	P	B37004A-B.ADA	P
B37004C-B.ADA	P	B37004D-B.ADA	P
B37004E-B.ADA	P	B37004F-B.ADA	P
B37004G-B.ADA	P	B37004H-B.ADA	P
B37101A.ADA	P	B37201A.ADA	P
B37202A.ADA	P	B37202B.ADA	P
B37203A.ADA	P	B37204A-AB.ADA	P
B37205A-AB.ADA	P	B37301A.ADA	P
B37301B.ADA	P	B37302A-AB.ADA	P
B37303A.ADA	P	B37307B-AB.ADA	P
B37309B-AB.ADA	P	B37310B-B.ADA	P
B37311A-AB.ADA	P	B38001A.ADA	P
B38003A-AB.ADA	P	B38008A-B.ADA	P
B38008B-AB.ADA	P	B38101A-B.ADA	P
B38101B-AB.ADA	P	B38103A-B.ADA	P
B38103B-B.ADA	P	B38103C0-B.ADA	P
B38103C1-B.ADA	P	B38103C2-B.ADA	P
B38103C3M-B.ADA	P	B38105A-AB.ADA	P
B38105B-AB.ADA	P	B38106A-B.ADA	P
B38106B-B.ADA	P	C32203A-B.ADA	P
C34001A-B.ADA	P	C34001B-B.ADA	P
C34001C-B.ADA	P	C34001D-B.DEP	N/A
C34001E-B.DEP	N/A	C34001F-B.DEP	N/A
C34001G-B.DEP	N/A	C34001H-B.ADA	P
C34001I-B.ADA	P	C34001K-B.ADA	P
C34001L-B.ADA	P	C34001M-B.ADA	P
C34001N-B.ADA	P	C34001O-B.ADA	P
C34001P-B.ADA	P	C34001Q-B.ADA	P
C34001R-B.ADA	P	C34001T-B.ADA	P
C34002A-B.ADA	P	C34002B-B.ADA	P
C35104A.ADA	P	C35504A-AB.ADA	P

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C35504B-B.ADA	P	C35505A.ADA	P
C35505B.ADA	P	C35508A-AB.ADA	P
C35508B-B.ADA	P	C35702A-AB.DEP	N/A
C35702B-AB.DEP	N/A	C35703A.ADA	P
C35704A-AB.ADA	P	C35704B-AB.ADA	P
C35704C-AB.ADA	P	C35704D-AB.ADA	P
C35705A-B.DEP	P	C35705B-B.DEP	P
C35705C-B.DEP	P	C35705D-B.DEP	P
C35705E-B.DEP	P	C35705F-B.DEP	N/A
C35705G-B.DEP	N/A	C35705H-B.DEP	N/A
C35705I-B.DEP	N/A	C35705J-B.DEP	N/A
C35705K-B.DEP	N/A	C35705L-B.DEP	N/A
C35705M-B.DEP	N/A	C35705N-B.DEP	N/A
C35705O-B.DEP	N/A	C35705P-B.DEP	N/A
C35705Q-B.DEP	N/A	C35705R-B.DEP	N/A
C35705S-B.DEP	N/A	C35705T-B.DEP	N/A
C35705U-B.DEP	N/A	C35705V-B.DEP	N/A
C35705W-B.DEP	N/A	C35705X-B.DEP	N/A
C35705Y-B.DEP	N/A	C35706A-B.DEP	P
C35706B-B.DEP	P	C35706C-B.DEP	P
C35706D-B.DEP	P	C35706E-B.DEP	P
C35706F-B.DEP	N/A	C35706G-B.DEP	N/A
C35706H-B.DEP	N/A	C35706I-B.DEP	N/A
C35706J-B.DEP	N/A	C35706K-B.DEP	N/A
C35706L-B.DEP	N/A	C35706M-B.DEP	N/A
C35706N-B.DEP	N/A	C35706O-B.DEP	N/A
C35706P-B.DEP	N/A	C35706Q-B.DEP	N/A
C35706R-B.DEP	N/A	C35706S-B.DEP	N/A
C35706T-B.DEP	N/A	C35706U-B.DEP	N/A
C35706V-B.DEP	N/A	C35706W-B.DEP	N/A
C35706X-B.DEP	N/A	C35706Y-B.DEP	N/A
C35707A-B.DEP	P	C35707B-B.DEP	P
C35707C-B.DEP	P	C35707D-B.DEP	P
C35707E-B.DEP	P	C35707F-B.DEP	N/A
C35707G-B.DEP	N/A	C35707H-B.DEP	N/A
C35707I-B.DEP	N/A	C35707J-B.DEP	N/A
C35707K-B.DEP	N/A	C35707L-B.DEP	N/A
C35707M-B.DEP	N/A	C35707N-B.DEP	N/A
C35707O-B.DEP	N/A	C35707P-B.DEP	N/A
C35707Q-B.DEP	N/A	C35707R-B.DEP	N/A
C35707S-B.DEP	N/A	C35707T-B.DEP	N/A
C35707U-B.DEP	N/A	C35707V-B.DEP	N/A
C35707W-B.DEP	N/A	C35707X-B.DEP	N/A
C35707Y-B.DEP	N/A	C35708A-B.DEP	P
C35708B-B.DEP	P	C35708C-B.DEP	P
C35708D-B.DEP	P	C35708E-B.DEP	P
C35708F-B.DEP	N/A	C35708G-B.DEP	N/A
C35708H-B.DEP	N/A	C35708I-B.DEP	N/A
C35708J-B.DEP	N/A	C35708K-B.DEP	N/A
C35708L-B.DEP	N/A	C35708M-B.DEP	N/A
C35708N-B.DEP	N/A	C35708O-B.DEP	N/A
C35708P-B.DEP	N/A	C35708Q-B.DEP	N/A
C35708Q-B.DEP	N/A	C35708S-B.DEP	N/A
C35708T-B.DEP	N/A	C35708U-B.DEP	N/A

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C35708V-B.DEP	N/A	C35708W-B.DEP	N/A
C35708X-B.DEP	N/A	C35708Y-B.DEP	N/A
C35711A-B.ADA	P	C35802A-B.DEP	P
C35802B-B.DEP	P	C35802C-B.DEP	P
C35802D-B.DEP	P	C35802E-B.DEP	P
C35802F-B.DEP	N/A	C35802G-B.DEP	N/A
C35802H-B.DEP	N/A	C35802I-B.DEP	N/A
C35802J-B.DEP	N/A	C35802K-B.DEP	N/A
C35802L-B.DEP	N/A	C35802M-B.DEP	N/A
C35802N-B.DEP	N/A	C35802O-B.DEP	N/A
C35802P-B.DEP	N/A	C35802Q-B.DEP	N/A
C35802R-B.DEP	N/A	C35802S-B.DEP	N/A
C35802T-B.DEP	N/A	C35802U-B.DEP	N/A
C35802V-B.DEP	N/A	C35802W-B.DEP	N/A
C35802X-B.DEP	N/A	C35802Y-B.DEP	N/A
C35904A-B.ADA	P	C36172A-B.ADA	P
C36174A-B.ADA	P	C36204A-B.ADA	P
C36205A.ADA	P	C36205B.ADA	P
C36205C.ADA	P	C36205D.ADA	P
C36205E.ADA	P	C36205F.ADA	P
C36205G.ADA	P	C36205H.ADA	P
C36205I.ADA	P	C36205J.ADA	P
C36205K.ADA	P	C36301A-B.ADA	P
C36301B-AB.ADA	P	C36302A.ADA	P
C36303A.ADA	P	C36304A-B.ADA	P
C36305A-AB.ADA	P	C37005A.ADA	P
C37007A-AB.ADA	P	C37008A-B.ADA	P
C37008B-B.ADA	P	C37011A-B.ADA	W
C37012A-AB.ADA	P	C37013A-AB.ADA	P
C37103A-AB.ADA	P	C37105A.ADA	P
C37208A-B.ADA	P	C37208B-AB.ADA	P
C37209A.ADA	P	C37304A-AB.ADA	P
C37305A.ADA	P	C37306A.ADA	P
C37307A-AB.ADA	P	C37309A-AB.ADA	P
C37310A-AB.ADA	P	C38004A.ADA	P
C38005A-B.ADA	P	C38006A-B.ADA	P
C38007A-B.ADA	P	C38102A-AB.ADA	P
C38102B-B.ADA	P	C38102C-B.ADA	P
C38104A-B.ADA	W	E36202A-B.ADA	P
E36202B-B.ADA	P		

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CHAPTER 4 TEST RESULTS

B41101A-B.ADA	P	B41101C-AB.ADA	P
B41102A-AB.ADA	P	B41102B-B.ADA	P
B41102C-B.ADA	P	B41201A-B.ADA	P
B41201C.ADA	P	B41202A-B.ADA	P
B41202B-AB.ADA	P	B41202C-B.ADA	P
B41202D-B.ADA	P	B41302A-AB.ADA	P
B41302B-AB.ADA	P	B42004A-B.ADA	P
B43101A-B.ADA	P	B43201A-B.ADA	P
B43201B-B.ADA	W	B43201C-B.ADA	P
B43201D-B.ADA	P	B43202A-B.ADA	P
B43202B-B.ADA	P	B43202C-B.ADA	P
B43203A-B.ADA	P	B43203B-B.ADA	W
B44001A-B.ADA	P	B44002A-B.ADA	P
B44002B-B.ADA	P	B44002C.ADA	P
B45102A-AB.ADA	P	B45203A.ADA	P
B45203B-AB.ADA	P	B45205A-AB.ADA	P
B45206A-AB.ADA	P	B45206B-B.ADA	P
B45207A-AB.ADA	P	B45207B-B.ADA	P
B45207C-B.ADA	P	B45207D-B.ADA	P
B45207G-B.ADA	P	B45207H-B.ADA	P
B45207I-B.ADA	P	B45207J-B.ADA	P
B45207M-AB.ADA	P	B45207N-AB.ADA	P
B45207O-AB.ADA	P	B45207P-B.ADA	P
B45207S-AB.ADA	P	B45207T-AB.ADA	P
B45207U-AB.ADA	P	B45207V-B.ADA	P
B45208A-AB.ADA	P	B45208B-B.ADA	P
B45208C-B.ADA	P	B45208G-AB.ADA	P
B45208H-B.ADA	P	B45208I-B.ADA	P
B45208M-AB.ADA	P	B45208N-AB.ADA	P
B45208S-AB.ADA	P	B45208T-AB.ADA	P
B45261A-AB.ADA	P	B45261B-AB.ADA	P
B45261C-AB.ADA	P	B45261D-AB.ADA	P
B45402A.ADA	P	B45522A.ADA	P
B45533A-AB.ADA	P	B48001A-B.ADA	P
B48001B-B.ADA	P	B48001C-AB.ADA	P
B48001D-B.ADA	P	B48002A-B.ADA	P
B48002B-AB.ADA	P	B48002C-B.ADA	P
B48002D-B.ADA	P	B48002E-AB.ADA	P
B48002F-AB.ADA	P	B48002G-AB.ADA	P
B48002I-B.ADA	P	B48002J-B.ADA	P
B4A006A-B.ADA	P	B4A016A.ADA	P
C41101D-B.ADA	P	C41103A-B.ADA	P
C41103B-B.ADA	P	C41105A-B.ADA	P
C41106A-B.ADA	P	C41107A-AB.ADA	P
C41201D-B.ADA	P	C41203A-B.ADA	P
C41203B-B.ADA	P	C41204A.ADA	P
C41205A-B.ADA	P	C41206A.ADA	P
C41301A-B.ADA	P	C41303A-B.ADA	P
C41303B-B.ADA	P	C41303C-B.ADA	P
C41303E-B.ADA	P	C41303F-B.ADA	P
C41303G-B.ADA	P	C41303I-B.ADA	P
C41303J-B.ADA	P	C41303K-B.ADA	P

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C41303M-B.ADA	P	C41303N-B.ADA	P
C41303O-B.ADA	P	C41303Q-B.ADA	P
C41303R-B.ADA	P	C41303S-B.ADA	P
C41303U-B.ADA	P	C41303V-B.ADA	P
C41303W-B.ADA	P	C41304A-B.ADA	P
C41306A-B.ADA	P	C41306B-B.ADA	P
C41306C-B.ADA	P	C42005A-B.ADA	W
C42006A-B.ADA	P	C43103A-B.ADA	P
C43107A-B.ADA	P	C43205A-B.ADA	P
C43205B-B.ADA	P	C43205C-B.ADA	P
C43205D-B.ADA	P	C43205E-B.ADA	P
C43205F-B.ADA	P	C43205G-B.ADA	P
C43205H-B.ADA	P	C43205I-B.ADA	P
C43205J-B.ADA	P	C43205K-B.ADA	P
C43206A-B.ADA	W	C43207A-B.ADA	P
C43207B-B.ADA	P	C43207C-B.ADA	P
C43207D-B.ADA	P	C43208A-B.ADA	P
C43208B-B.ADA	P	C43210A-B.ADA	P
C43211A-B.ADA	P	C43212A-B.ADA	P
C43213A-B.ADA	P	C43214A-B.ADA	P
C43214B-B.ADA	P	C43214C-B.ADA	P
C43214D-B.ADA	P	C43214E-B.ADA	P
C43214F-B.ADA	P	C43215A-B.ADA	P
C43215B-B.ADA	P	C45101A.ADA	P
C45101B.ADA	P	C45101C.ADA	P
C45101E.ADA	P	C45101G-AB.ADA	P
C45101H-AB.ADA	P	C45101I.ADA	P
C45103A-AB.ADA	P	C45103B-AB.ADA	P
C45103C-AB.ADA	P	C45104A.ADA	P
C45105A-AB.ADA	P	C45105B-B.ADA	P
C45106A.ADA	P	C45201A.ADA	P
C45201B.ADA	P	C45202A-AB.ADA	P
C45210A.ADA	P	C45220A.ADA	P
C45220B.ADA	P	C45220C.ADA	P
C45220D.ADA	P	C45220E-B.ADA	P
C45241A-B.DEP	P	C45241B-B.DEP	P
C45241C-B.DEP	P	C45241D-B.DEP	P
C45241E-B.DEP	P	C45241F-B.DEP	N/A
C45241G-B.DEP	N/A	C45241H-B.DEP	N/A
C45241I-B.DEP	N/A	C45241J-B.DEP	N/A
C45241K-B.DEP	N/A	C45241L-B.DEP	N/A
C45241M-B.DEP	N/A	C45241N-B.DEP	N/A
C45241O-B.DEP	N/A	C45241P-B.DEP	N/A
C45241Q-B.DEP	N/A	C45241R-B.DEP	N/A
C45241S-B.DEP	N/A	C45241T-B.DEP	N/A
C45241U-B.DEP	N/A	C45241V-B.DEP	N/A
C45241W-B.DEP	N/A	C45241X-B.DEP	N/A
C45241Y-B.DEP	N/A	C45274A-AB.ADA	P
C45274B-AB.ADA	P	C45274C-AB.ADA	P
C45303A-B.ADA	P	C45321A-B.DEP	W
C45321B-B.DEP	W	C45321C-B.DEP	W
C45321D-B.DEP	W	C45321E-B.DEP	W
C45321F-B.DEP	W	C45321G-B.DEP	W
C45321H-B.DEP	W	C45321I-B.DEP	W

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C45321J-B.DEP	W	C45321K-B.DEP	W
C45321L-B.DEP	W	C45321M-B.DEP	W
C45321N-B.DEP	W	C45321O-B.DEP	W
C45321P-B.DEP	W	C45321Q-B.DEP	W
C45321R-B.DEP	W	C45321S-B.DEP	W
C45321T-B.DEP	W	C45321U-B.DEP	W
C45321V-B.DEP	W	C45321W-B.DEP	W
C45321X-B.DEP	W	C45321Y-B.DEP	W
C45345A-AB.ADA	P	C45345B-AB.ADA	P
C45401A.ADA	P	C45401B-AB.ADA	P
C45413A-B.ADA	P	C45421A-B.DEP	P
C45421B-B.DEP	P	C45421C-B.DEP	P
C45421D-B.DEP	P	C45421E-B.DEP	P
C45421F-B.DEP	N/A	C45421G-B.DEP	N/A
C45421H-B.DEP	N/A	C45421I-B.DEP	N/A
C45421J-B.DEP	N/A	C45421K-B.DEP	N/A
C45421L-B.DEP	N/A	C45421M-B.DEP	N/A
C45421N-B.DEP	N/A	C45421O-B.DEP	N/A
C45421P-B.DEP	N/A	C45421Q-B.DEP	N/A
C45421R-B.DEP	N/A	C45421S-B.DEP	N/A
C45421T-B.DEP	N/A	C45421U-B.DEP	N/A
C45421V-B.DEP	N/A	C45421W-B.DEP	N/A
C45421X-B.DEP	N/A	C45421Y-B.DEP	N/A
C45424A-B.DEP	P	C45424B-B.DEP	P
C45424C-B.DEP	P	C45424D-B.DEP	P
C45424E-B.DEP	P	C45424F-B.DEP	N/A
C45424G-B.DEP	N/A	C45424H-B.DEP	N/A
C45424I-B.DEP	N/A	C45424J-B.DEP	N/A
C45424K-B.DEP	N/A	C45424L-B.DEP	N/A
C45424M-B.DEP	N/A	C45424N-B.DEP	N/A
C45424O-B.DEP	N/A	C45424P-B.DEP	N/A
C45424Q-B.DEP	N/A	C45424R-B.DEP	N/A
C45424S-B.DEP	N/A	C45424T-B.DEP	N/A
C45424U-B.DEP	N/A	C45424V-B.DEP	N/A
C45424W-B.DEP	N/A	C45424X-B.DEP	N/A
C45424Y-B.DEP	N/A	C45505A-B.ADA	P
C45521A-B.DEP	W	C45521B-B.DEP	W
C45521C-B.DEP	W	C45521D-B.DEP	W
C45521E-B.DEP	W	C45521F-B.DEP	W
C45521G-B.DEP	W	C45521H-B.DEP	W
C45521I-B.DEP	W	C45521J-B.DEP	W
C45521K-B.DEP	W	C45521L-B.DEP	W
C45521M-B.DEP	W	C45521N-B.DEP	W
C45521O-B.DEP	W	C45521P-B.DEP	W
C45521Q-B.DEP	W	C45521R-B.DEP	W
C45521S-B.DEP	W	C45521T-B.DEP	W
C45521U-B.DEP	W	C45521V-B.DEP	W
C45521W-B.DEP	W	C45521X-B.DEP	W
C45521Y-B.DEP	W	C45521Z-B.DEP	W
C45526A-B.ADA	P	C45621A.DEP	P
C45621B.DEP	P	C45621C.DEP	P
C45621D.DEP	P	C45621E.DEP	P
C45621F.DEP	N/A	C45621G.DEP	N/A
C45621H.DEP	N/A	C45621I.DEP	N/A

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C45621J.DEP	N/A	C45621K.DEP	N/A
C45621L.DEP	N/A	C45621M.DEP	N/A
C45621N.DEP	N/A	C45621O.DEP	N/A
C45621P.DEP	N/A	C45621Q.DEP	N/A
C45621R.DEP	N/A	C45621S.DEP	N/A
C45621T.DEP	N/A	C45621U.DEP	N/A
C45621V.DEP	N/A	C45621W.DEP	N/A
C45621X.DEP	N/A	C45621Y.DEP	N/A
C45621Z.DEP	N/A	C48003A-B.ADA	P
C48003B-B.ADA	P	C48003C-B.ADA	P
C48003D-B.ADA	P	C48003E-B.ADA	P
C48003F.ADA	P	C48003G-B.ADA	P
C48004A-B.ADA	P	C48005A-B.ADA	P
C48005B-B.ADA	P	C48005C-AB.ADA	P
C48005D-AB.ADA	P	C4A001A.ADA	P
C4A003A.ADA	P	C4A010A-B.ADA	P
C4A011A.ADA	P	C4A013A.ADA	P
D4A002A-AB.ADA	P	D4A002B.ADA	P
D4A004A-AB.ADA	P	D4A004B.ADA	P
E43211B-B.ADA	P	E43212B-B.ADA	P

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CHAPTER 5 TEST RESULTS

A54B01A-B.ADA	P	A54B02A-B.ADA	P
A55B12A-AB.ADA	P	A55B13A-AB.ADA	P
A55B14A-AB.ADA	P	B51001A-AB.ADA	P
B51003A-AB.ADA	P	B52002A-B.ADA	P
B52002B-AB.ADA	P	B52002C-AB.ADA	P
B52002D-AB.ADA	P	B52002E-AB.ADA	P
B52002F-B.ADA	P	B52002G-AB.ADA	P
B52003A-AB.ADA	P	B52004A-B.ADA	P
B52004B-AB.ADA	P	B52004C-AB.ADA	P
B52004D-AB.DEP	N/A	B52004E-AB.DEP	N/A
B52006A-AB.ADA	P	B53001A-AB.ADA	P
B53001B-AB.ADA	P	B53002A-AB.ADA	P
B53002B-AB.ADA	P	B53003A-AB.ADA	P
B53004A-AB.ADA	P	B53009A-AB.ADA	P
B54A01A-AB.ADA	P	B54A01B-AB.ADA	P
B54A01C-AB.ADA	P	B54A01D-AB.ADA	P
B54A01E-AB.ADA	P	B54A01F-AB.ADA	P
B54A01G-AB.ADA	P	B54A01H-AB.ADA	P
B54A01I-AB.ADA	P	B54A01J-AB.ADA	P
B54A01K-AB.ADA	P	B54A01L-AB.ADA	P
B54A05A.ADA	P	B54A05B.ADA	P
B54A08A-B.ADA	P	B54A20A.ADA	P
B54A21A-B.ADA	P	B54A25A-B.ADA	P
B54A27B-AB.ADA	P	B54A27D-AB.ADA	P
B54B01B-B.TST	P	B54B01C-B.ADA	P
B54B02B-B.ADA	P	B54B02C-B.ADA	P
B54B02D-B.ADA	P	B54B04A-AB.ADA	P
B54B04B-AB.ADA	P	B54B05A-AB.ADA	P
B55A01A-AB.ADA	P	B55A01B-AB.ADA	P
B55A01C-AB.ADA	P	B55A01D-AB.ADA	P
B55A01E-AB.ADA	P	B55A01F-AB.ADA	P
B55A01G-AB.ADA	P	B55A01H-AB.ADA	P
B55A01I-AB.ADA	P	B55A01J-AB.ADA	P
B55A01K-AB.ADA	P	B55A01L-AB.ADA	P
B55A01M-AB.ADA	P	B55A01N-AB.ADA	P
B55A01O-AB.ADA	P	B55A01P-AB.ADA	P
B55A01Q-AB.ADA	P	B55A01R-AB.ADA	P
B55A01S-AB.ADA	P	B55A01T-AB.ADA	P
B55A01U-AB.ADA	P	B55A01V-AB.ADA	P
B55B01A-AB.ADA	P	B55B01B-AB.ADA	P
B55B09B-AB.ADA	P	B55B09C-AB.DEP	N/A
B55B09D-AB.DEP	N/A	B55B12B-B.ADA	P
B55B12C-AB.ADA	P	B55B14B-B.ADA	P
B55B18A-B.ADA	P	B56001A-AB.ADA	P
B56001C-AB.ADA	P	B56001D-AB.ADA	P
B56001E-AB.ADA	P	B56001F-AB.ADA	P
B56001G-AB.ADA	P	B56001H-AB.ADA	P
B57001A-AB.ADA	P	B57001B-B.ADA	P
B57001C-AB.ADA	P	B57001D-AB.ADA	P
B58001A-AB.ADA	P	B58002A-B.ADA	P
B58002B-AB.ADA	P	B58002C-AB.ADA	P
B58003A-B.ADA	P	B58003B-AB.ADA	P

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B59001A-AB.ADA	P	B59001C-AB.ADA	P
B59001D-AB.ADA	P	B59001E-AB.ADA	P
B59001F-AB.ADA	P	B59001G-AB.ADA	P
B59001H-AB.ADA	P	B59001I-AB.ADA	P
C51002A-AB.ADA	P	C52001A-B.ADA	P
C52001B-AB.ADA	W	C52001C-AB.ADA	P
C52005A-AB.ADA	P	C52005B-AB.ADA	P
C52005C-AB.ADA	P	C52005D-AB.ADA	P
C52005E-AB.ADA	P	C52005F-AB.ADA	P
C52007A-B.ADA	W	C52008A-AB.ADA	P
C52008B-B.ADA	P	C52009A-B.ADA	P
C52009B-B.ADA	P	C52010A-AB.ADA	P
C52011A-B.ADA	P	C52011B-AB.ADA	P
C52102A-AB.ADA	W	C52102B-AB.ADA	W
C52103A-AB.ADA	P	C52103B-AB.ADA	P
C52103C-AB.ADA	P	C52103F-AB.ADA	P
C52103G-AB.ADA	P	C52103H-AB.ADA	P
C52103K-AB.ADA	P	C52103L-AB.ADA	P
C52103M-AB.ADA	P	C52103P-AB.ADA	P
C52103Q-AB.ADA	P	C52103R-AB.ADA	P
C52103X-B.ADA	W	C52104A-AB.ADA	P
C52104B-AB.ADA	P	C52104C-AB.ADA	P
C52104F-AB.ADA	P	C52104G-AB.ADA	W
C52104H-AB.ADA	P	C52104K-AB.ADA	P
C52104L-AB.ADA	P	C52104M-AB.ADA	P
C52104P-AB.ADA	P	C52104Q-AB.ADA	W
C52104R-AB.ADA	P	C52104X-B.ADA	P
C52104Y-B.ADA	P	C53004B-B.ADA	P
C53005A-AB.ADA	P	C53005B-AB.ADA	P
C53006A-AB.ADA	P	C53006B-AB.ADA	P
C53007A-AB.ADA	P	C53008A-AB.ADA	P
C54A03A.ADA	P	C54A04A-AB.ADA	P
C54A06A-AB.ADA	P	C54A07A-AB.ADA	P
C54A22A-AB.ADA	P	C54A23A-B.ADA	P
C54A24A-AB.ADA	P	C54A24B.ADA	P
C54A26A.ADA	P	C54A27A-AB.ADA	P
C54A41A.ADA	P	C54A42A.ADA	P
C54A42B.ADA	P	C54A42C.ADA	P
C54A42D.ADA	P	C54A42E.ADA	P
C54A42F.ADA	P	C54A42G.ADA	P
C55B03A-AB.ADA	P	C55B04A-AB.ADA	P
C55B05A-AB.ADA	P	C55B06A-AB.ADA	P
C55B06B-AB.ADA	P	C55B07A-AB.DEP	N/A
C55B07B-AB.DEP	N/A	C55B08A-B.ADA	P
C55B09A-AB.ADA	P	C55B15A-B.ADA	W
C55B16A-AB.DEP	P	C55C01A-B.ADA	P
C55C02A-AB.ADA	P	C55C02B-AB.ADA	P
C55C03A-AB.ADA	P	C55C03B-AB.ADA	P
C55D01A-AB.ADA	P	C56002A-AB.ADA	P
C57002A-AB.ADA	P	C57003A-AB.ADA	P
C57004A-AB.ADA	P	C57004B-AB.ADA	P
C57004C-AB.ADA	P	C57005A-B.ADA	P
C58004A-AB.ADA	P	C58004B-AB.ADA	P
C58004C-AB.ADA	P	C58004D-B.ADA	P

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C58004F-AB.ADA	P	C58004G-AB.ADA	P
C58005A-AB.ADA	P	C58005B-AB.ADA	P
C58005H-AB.ADA	P	C58006A-AB.ADA	P
C58006B-AB.ADA	P	C59001B-AB.ADA	P
C59002A-AB.ADA	P	C59002B-AB.ADA	P
C59002C-B.ADA	P	D55A03A-AB.ADA	P
D55A03B-AB.ADA	P	D55A03C-AB.ADA	P
D55A03D-AB.ADA	P	D55A03E-AB.ADA	P
D55A03F-AB.ADA	P	D55A03G-AB.ADA	P
D55A03H-AB.ADA	P	D56001B-AB.ADA	P
E52103Y-B.ADA	P		

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CHAPTER 6 TEST RESULTS

A62006D-B.ADA	P	B61001A-AB.ADA	P
B61001B-AB.ADA	P	B61001C-AB.ADA	P
B61001D-AB.ADA	P	B61001E-AB.ADA	P
B61001F-AB.ADA	P	B61001G-AB.ADA	P
B61001H-AB.ADA	P	B61001I-AB.ADA	P
B61001J-AB.ADA	P	B61001K-AB.ADA	P
B61001L-AB.ADA	P	B61001M-AB.ADA	P
B61003A-AB.ADA	P	B61005A-B.ADA	P
B61005B-B.ADA	P	B61012A-B.ADA	P
B62001A.ADA	P	B62001B-AB.ADA	P
B62001C-AB.ADA	P	B62001D-AB.ADA	P
B62006B-B.ADA	P	B62006C-B.ADA	P
B62006E-B.ADA	P	B62006F-B.ADA	P
B63001A.ADA	P	B63005A-AB.ADA	P
B63005B-AB.ADA	P	B63009A-B.ADA	P
B63009B-B.ADA	P	B63009C0-B.ADA	P
B63009C1-B.ADA	P	B63009C2-B.ADA	P
B63009C3M-B.ADA	P	B63102A-B.ADA	P
B64001A-B.ADA	P	B64002A.ADA	P
B64003A.ADA	P	B64004A.ADA	P
B64005A-AB.ADA	P	B64006A.ADA	P
B64101A-B.ADA	P	B65001A.ADA	P
B65002A-AB.ADA	P	B65002B-AB.ADA	P
B66001A-B.ADA	P	B66001C.ADA	P
B67001A-B.ADA	P	B67001B-AB.ADA	P
B67004A-B.ADA	P	C61003B-AB.ADA	P
C61008A-B.ADA	P	C61009A-B.ADA	P
C61010A-AB.ADA	P	C62002A-B.ADA	P
C62003A-B.ADA	P	C62004A.ADA	P
C62006A-B.ADA	P	C63004A-AB.ADA	P
C64002B-B.ADA	P	C64004B.ADA	P
C64007A.ADA	P	C64104A-AB.ADA	P
C64104B-AB.ADA	P	C64104C-AB.ADA	P
C64104D-AB.ADA	P	C64104E-AB.ADA	P
C64104F-AB.ADA	P	C64104G-AB.ADA	P
C64104H.ADA	P	C64104I.ADA	P
C64104J.ADA	P	C64104K-AB.ADA	P
C64104L-AB.ADA	P	C64104M-AB.ADA	P
C64105A.ADA	P	C64105B-AB.ADA	P
C64105C-AB.ADA	P	C64105D-AB.ADA	P
C64106A-B.ADA	P	C64106B-B.ADA	P
C64106C-B.ADA	P	C64106D-B.ADA	P
C64107A-B.ADA	P	C64108A-B.ADA	P
C64202A-B.ADA	P	C65003A-B.ADA	P
C65003B-B.ADA	P	C66002A-B.ADA	P
C66002C.ADA	P	C66002D.ADA	P
C66002E-AB.ADA	P	C66002F.ADA	P
C66002G-B.ADA	P	C67002A.ADA	P
C67003A-B.ADA	P	C67003B.ADA	P
C67003C-AB.ADA	P	C67003D-B.ADA	P
C67003E-AB.ADA	P	C67005A-B.ADA	P
C67005B-B.ADA	P		

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CHAPTER 7 TEST RESULTS

A71002A-AB.ADA	P	A71004A-AB.ADA	P
A72001A-AB.ADA	P	A74006A-AB.ADA	P
A74105B-B.ADA	P	A741C6A-AB.ADA	P
A74106B-AB.ADA	P	A74106C-AB.ADA	P
A74205E-B.ADA	P	A74205F-B.ADA	P
B71001A-AB.ADA	P	B71001B-AB.ADA	P
B71001C-AB.ADA	P	B71001D-AB.ADA	P
B71001E-AB.ADA	P	B71001F-AB.ADA	P
B71001G-AB.ADA	P	B71001H-AB.ADA	P
B71001I-AB.ADA	P	B71001J-AB.ADA	P
B71001K-AB.ADA	P	B71001L-AB.ADA	P
B71001M-AB.ADA	P	B71001N-AB.ADA	P
B71001O-AB.ADA	P	B71001P-AB.ADA	P
B71001Q-AB.ADA	P	B71001R-AB.ADA	P
B71001T-AB.ADA	P	B71001U-AB.ADA	P
B71001V-AB.ADA	P	B71001W-AB.ADA	P
B71002B-AB.ADA	P	B73001A-AB.ADA	P
B73001B-AB.ADA	P	B73001C-B.ADA	P
B73001D-B.ADA	P	B73001E-AB.ADA	P
B73001F-AB.ADA	P	B73001G-B.ADA	P
B73001H-B.ADA	P	B73006A-AB.ADA	P
B74001A-AB.ADA	P	B74001B-AB.ADA	P
B74003A-B.ADA	P	B74101A-B.ADA	P
B74102B-B.ADA	P	B74103A-B.ADA	P
B74103B-B.ADA	P	B74103C-B.ADA	P
B74103D-B.ADA	P	B74104A-B.ADA	P
B74105A-B.ADA	P	B74105C-B.ADA	P
B74201A-AB.ADA	P	B74205A-B.ADA	P
B74205B-B.ADA	P	B74207A-B.ADA	P
B74301A-B.ADA	P	B74301B-B.ADA	P
B74304A-B.ADA	P	B74304C-B.ADA	P
B74401A-B.ADA	P	B74409A-B.ADA	P
C72001B-AB.ADA	P	C73002A-B.ADA	P
C74203B-B.ADA	P	C74206A-B.ADA	P
C74209A-AB.ADA	P	C74210A-AB.ADA	P
C74211A-B.ADA	P	C74211B-B.ADA	P
C74302A-B.ADA	P	C74305A-B.ADA	P
C74305B-B.ADA	P	C74402A-B.ADA	P
C74409B-B.ADA	P		

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CHAPTER 8 TEST RESULTS

A83A02A.ADA	P	A83A02B.ADA	P
A83A06A-B.ADA	P	A83C01C.ADA	P
A83C01D.ADA	P	A83C01E.ADA	P
A83C01F.ADA	P	A83C01G.ADA	P
A83C01H.ADA	P	A83C01I.ADA	P
A83C01J.ADA	P	A85007D-B.ADA	W
A85013B-B.ADA	P	B83A01A-AB.ADA	P
B83A01B-B.ADA	P	B83A01C.ADA	P
B83A05A-AB.ADA	P	B83A06B-B.ADA	P
B83A06H-B.ADA	P	B83B01A-AB.ADA	P
B83B02C.ADA	P	B83C01A-AB.ADA	P
B83C02A.ADA	P	B83E02C-B.ADA	P
B83F02A.ADA	P	B83F02B.ADA	P
B83F04A-AB.ADA	P	B84001A-AB.ADA	P
B84002B-B.ADA	P	B84004A-B.ADA	P
B84006A-B.ADA	P	B85007B-B.ADA	P
B85007C-B.ADA	P	B85012A-B.ADA	P
B85015A-B.ADA	P	B86001A0-AB.ADA	P
B86001A1M-AB.ADA	P	B86001BOM-B.ADA	P
B86001BA-B.ADA	P	B86001BB-B.ADA	P
B86001BC-B.ADA	P	B86001BD-B.ADA	P
B86001BE-B.ADA	P	B86001BF-B.ADA	P
B86001BG-B.ADA	P	B86001BH-B.ADA	P
B86001BI-B.ADA	P	B86001BJ-B.ADA	P
B86001BK-B.ADA	P	B86001BL-B.ADA	P
B86001BM-B.ADA	P	B86001BO-B.ADA	P
B86001BU-B.ADA	P	B86001BV-B.ADA	P
B86001BW-B.ADA	P	B86001BX-B.ADA	P
B86001COM-AB.DEP	P	B86001CP-AB.DEP	N/A
B86001CQ-AB.DEP	N/A	B86001CR-AB.DEP	N/A
B86001CS-AB.DEP	N/A	B86001DOM-AB.TST	P
B86001DT-AB.TST	N/A	B87B48C-B.ADA	P
C83B02A.ADA	P	C83B02B.ADA	P
C83C01B.ADA	P	C83E02A.ADA	P
C83E02B.ADA	P	C83E03A.ADA	P
C83E04A.ADA	P	C83F01A.ADA	P
C83F01B.ADA	P	C83F01C0.ADA	P
C83F01C1.ADA	P	C83F01C2M.ADA	P
C83F01DOM.ADA	P	C83F01D1.ADA	P
C83F03A.ADA	P	C83F03B.ADA	P
C83F03C0.ADA	P	C83F03C1.ADA	P
C83F03C2M.ADA	P	C83F03DOM.ADA	P
C83F03D1.ADA	P	C84002A-B.ADA	P
C85007A-B.ADA	P	C85007E-B.ADA	P
C85013A-B.ADA	P	C86001E-B.ADA	N/A
C86002A0.ADA	P	C86002A1.ADA	P
C86002A2M.ADA	P	C86002B1.ADA	P
C86002B2M.ADA	P	C86003A-B.ADA	P
C87A05A-B.ADA	P	C87A05B-B.ADA	P
C87B02A-B.ADA	P	C87B02B-B.ADA	P
C87B03A-B.ADA	P	C87B04A-B.ADA	W
C87B04B-B.ADA	P	C87B04C-B.ADA	P

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C87B05A-B.ADA	P	C87B06A-B.ADA	P
C87B07A-B.ADA	P	C87B07B-B.ADA	P
C87B07C-B.ADA	P	C87B07D-B.ADA	P
C87B07E-B.ADA	P	C87B08A-B.ADA	P
C87B09A-B.ADA	P	C87B09B-B.ADA	P
C87B09C-B.ADA	P	C87B10A-B.ADA	W
C87B11A-B.ADA	P	C87B11B-B.ADA	P
C87B13A-B.ADA	P	C87B14A-B.ADA	P
C87B14B-B.ADA	P	C87B14C-B.ADA	P
C87B14D-B.ADA	P	C87B15A-B.ADA	P
C87B16A-B.ADA	P	C87B17A-B.ADA	P
C87B18A-B.ADA	P	C87B18B-B.ADA	P
C87B19A-B.ADA	P	C87B23A-B.ADA	P
C87B24A-B.ADA	P	C87B24B-B.ADA	P
C87B26B-B.ADA	W	C87B27A-B.ADA	P
C87B28A-B.ADA	P	C87B29A-B.ADA	P
C87B30A-B.ADA	P	C87B31A-B.ADA	W
C87B32A-B.ADA	P	C87B33A-B.ADA	P
C87B34A-B.ADA	P	C87B34B-B.ADA	P
C87B34C-B.ADA	P	C87B35A-B.ADA	P
C87B35B-B.ADA	P	C87B35C-B.ADA	P
C87B37A-B.ADA	P	C87B38A-B.ADA	P
C87B39A-B.ADA	P	C87B40A-B.ADA	P
C87B41A-B.ADA	P	C87B42A-B.ADA	P
C87B43A-B.ADA	P	C87B44A-B.ADA	P
C87B45A-B.ADA	P	C87B45C-B.ADA	P
C87B47A-B.ADA	P	C87B48A-B.ADA	P
C87B48B-B.ADA	P	C87B54A-B.ADA	P
C87B57A-B.ADA	P	C87B62A-B.DEP	P
C87B62B-B.DEP	P	C87B62C-B.DEP	P

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CHAPTER 9 TEST RESULTS

A91002M-B.ADA	P	A95005A.ADA	P
A97106A-AB.ADA	P	B91001A-AB.ADA	P
B91001B-AB.ADA	P	B91001C-AB.ADA	P
B91001D-AB.ADA	P	B91001E-AB.ADA	P
B91001F-AB.ADA	P	B91001G-B.ADA	P
B91002A-B.ADA	P	B91002B-B.ADA	P
B91002C-B.ADA	P	B91002D-B.ADA	P
B91002E-B.ADA	P	B91002F-B.ADA	P
B91002G-B.ADA	P	B91002H-B.ADA	P
B91002I-B.ADA	P	B91002J-B.ADA	P
B91002K-B.ADA	P	B91002L-B.ADA	P
B91003A-AB.ADA	P	B91004A-B.ADA	P
B910ABA-B.ADA	P	B910ACA-B.ADA	P
B910AEA-B.ADA	P	B910BCA-B.ADA	P
B920ACA-B.ADA	P	B920BDA-B.ADA	P
B920BJA-B.ADA	P	B95001A.ADA	P
B95001B-AB.ADA	P	B95002A.ADA	P
B95004A-AB.ADA	P	B95004B-AB.ADA	P
B95006A.ADA	P	B95006B-AB.ADA	P
B95006C-AB.ADA	P	B95006D-AB.ADA	P
B95007A-AB.ADA	P	B95007B-AB.ADA	P
B95020A-B.ADA	P	B95020B0-B.ADA	P
B95020B1-B.ADA	P	B95020B2M-B.ADA	P
B950ABA-B.ADA	P	B950ABB-B.ADA	P
B950ACA-B.ADA	P	B950ADA-B.ADA	P
B950AFA-B.ADA	P	B950AHA-B.ADA	P
B950AJA-B.ADA	P	B950BAA-B.ADA	W
B950DHA-B.ADA	P	B97101A-AB.ADA	P
B97101B-AB.ADA	P	B97101C-AB.ADA	P
B97101D-AB.ADA	P	B97101E-AB.ADA	P
B97102A-AB.ADA	P	B97102B-AB.ADA	P
B97102C-AB.ADA	P	B97102D-AB.ADA	P
B97102E-AB.ADA	P	B97102F-AB.ADA	P
B97102G-AB.ADA	P	B97102H-AB.ADA	P
B97102I-AB.ADA	P	B97103A-AB.ADA	P
B97103B-AB.ADA	P	B97103D-AB.ADA	P
B97103E-AB.ADA	P	B97104A-AB.ADA	P
B97104B-AB.ADA	P	B97104C-AB.ADA	P
B97104D-AB.ADA	P	B97104E-AB.ADA	P
B97104F-AB.ADA	P	B97104G-AB.ADA	P
B97107A-AB.ADA	P	B97108A-AB.ADA	P
B97108B-AB.ADA	P	B97109A-AB.ADA	P
B97110A-AB.ADA	P	B97110B-AB.ADA	P
B97111A-AB.ADA	P	B99001A-AB.ADA	P
B99001B-B.ADA	P	B99002A-B.ADA	P
B99002B-B.ADA	P	B99002C-B.ADA	P
B99003A-AB.ADA	P	B9A001A-AB.ADA	P
B9A001B-AB.ADA	P	C900ACA-B.ADA	P
C910AHA-B.ADA	W	C910BAA-B.ADA	P
C910BAB-B.ADA	P	C910BAC-B.ADA	P
C910BAD-B.ADA	P	C910BDA-B.ADA	P
C910BDB-B.ADA	P	C910BDC-B.ADA	P

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C92002A.ADA	P
C920AJA-B.ADA	P
C920BBA-B.ADA	P
C93001A-B.ADA	P
C93003A-B.ADA	P
C930AEA-B.ADA	P
C930AJA-B.ADA	P
C930BDA-B.ADA	P
C94002A-B.ADA	P
C94003A-B.ADA	P
C94005A-B.ADA	P
C94006A-B.ADA	P
C94007B-B.ADA	P
C940ACA-B.ADA	P
C940ADA-B.ADA	P
C940AGB-B.ADA	P
C940AIA-B.ADA	P
C940BBA-B.ADA	P
C95009A.ADA	W
C95010A.ADA	P
C95012A-B.ADA	P
C95021A-B.ADA	P
C950BGA-B.ADA	P
C950BJA-B.ADA	P
C950CBA-B.ADA	P
C950CHC-B.ADA	P
C950DEB-B.ADA	P
C97113A-B.ADA	P
C97115A-B.ADA	P
C97201D-AB.ADA	P
C97201G-AB.ADA	P
C97201X-AB.ADA	P
C97203A-AB.ADA	P
C97204A-B.ADA	P
C97303B-AB.ADA	P
C9A003A-B.ADA	P
C9A005A-B.ADA	P
C9A007A-B.ADA	P

C92003A.ADA	P
C920BAA-B.ADA	P
C920BIA-B.ADA	P
C93002A-B.ADA	P
C930ABA-B.ADA	P
C930AFA-B.ADA	P
C930BAA-B.ADA	P
C94001A-B.ADA	P
C94002B-B.ADA	P
C94004A-B.ADA	P
C94005B-B.ADA	P
C94007A-B.ADA	P
C940ABA-B.ADA	P
C940ACB-B.ADA	P
C940AGA-B.ADA	P
C940AHA-B.ADA	P
C940BAA-B.ADA	P
C95008A.ADA	W
C95009B.ADA	P
C95011A.ADA	P
C95013A-B.ADA	P
C950ACB-B.ADA	P
C950BHA-B.ADA	P
C950CAA-B.ADA	P
C950CHA-B.ADA	P
C950DEA-B.ADA	P
C950DGA-B.ADA	P
C97114A-B.ADA	P
C97201A-AB.ADA	P
C97201E-AB.ADA	P
C97201H-AB.ADA	P
C97202A-AB.ADA	P
C97203B-AB.ADA	P
C97303A-AB.ADA	P
C97304A-B.ADA	P
C9A004A-B.ADA	P
C9A006A-B.ADA	P

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CHAPTER 10 TEST RESULTS

BA1020B0-B.ADA	P	BA1020B1-B.ADA	P
BA1020B2-B.ADA	P	BA1020B3-B.ADA	P
BA1020B4-B.ADA	P	BA1020B5-B.ADA	P
BA1020B6M-B.ADA	P	BA1101A-AB.ADA	P
BA1101B0M.ADA	P	BA1101B1.ADA	P
BA1101B2.ADA	P	BA1101B3.ADA	P
BA1101B4.ADA	P	BA1101C0.ADA	P
BA1101C1M.ADA	P	BA1101D.ADA	P
BA1101E.ADA	P	BA1101H0-B.ADA	P
BA1101H1M-B.ADA	P	BA2001A-AB.ADA	P
BA2001B.ADA	P	BA2001C.ADA	P
BA2001D.ADA	P	BA2001E.ADA	P
BA2001F0M.ADA	P	BA2001F1.ADA	P
BA2001F2.ADA	P	BA2001G0M.ADA	P
BA2001G1.ADA	P	BA2002A0M.ADA	P
BA2002A1.ADA	P	BA2002A2.ADA	P
BA2003B0M.ADA	P	BA2003B1.ADA	P
BA3001A0M-AB.ADA	P	BA3001A1-AB.ADA	P
BA3001A2-AB.ADA	P	BA3001A3-AB.ADA	P
BA3001B0M.ADA	P	BA3001B1.ADA	P
BA3001C0M-AB.ADA	P	BA3001C1-AB.ADA	P
BA3001D0M-AB.ADA	P	BA3001D1-AB.ADA	P
BA3001E0M-AB.ADA	P	BA3001E1-AB.ADA	P
BA3001E2-AB.ADA	P	BA3001E3-AB.ADA	P
BA3001F0M-AB.ADA	P	BA3001F1-AB.ADA	P
BA3001F2-AB.ADA	P	BA3001F3-AB.ADA	P
CA1002A0-B.ADA	P	CA1002A1-B.ADA	P
CA1002A2-B.ADA	P	CA1002A3M-B.ADA	P
CA1002A4-B.ADA	P	CA1002A5-B.ADA	P
CA1002A6-B.ADA	P	CA1002A7-B.ADA	P
CA1002A8-B.ADA	P	CA1002A9-B.ADA	P
CA1003A-AB.ADA	P	CA1003B-AB.ADA	P
CA1004A.ADA	P	CA1005A.ADA	P
CA1006A-AB.ADA	P	CA1008A0.ADA	P
CA1008A1M.ADA	P	CA1009A0.ADA	P
CA1009A1.ADA	P	CA1009A2.ADA	P
CA1009A3.ADA	P	CA1009A4M.ADA	P
CA1012A0-B.DEP	P	CA1012A1-B.DEP	P
CA1012A2-B.DEP	P	CA1012A3-B.DEP	P
CA1012A4M-B.DEP	P	CA1012B0-B.ADA	P
CA1012B2-B.ADA	P	CA1012B4M-B.ADA	P
CA1013A0-AB.ADA	P	CA1013A1-AB.ADA	P
CA1013A2-AB.ADA	P	CA1013A3-B.ADA	P
CA1013A4-B.ADA	P	CA1013A5-B.ADA	P
CA1013A6M-AB.ADA	P	CA1014A0M-AB.ADA	P
CA1014A1-AB.ADA	P	CA1014A2-AB.ADA	P
CA1014A3-AB.ADA	P	CA1016A0.ADA	P
CA1016A1.ADA	P	CA1016A2M.ADA	P
CA1020A0-B.ADA	P	CA1020A1-B.ADA	P
CA1020A2-B.ADA	P	CA1020A3-B.ADA	P
CA1020A4-B.ADA	P	CA1020A5-B.ADA	P
CA1020A6-B.ADA	P	CA1020A7-B.ADA	P

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CA1020A8M-B.ADA	P	CA1105A0.ADA	P
CA1105A1M.ADA	P	CA1105B0.ADA	P
CA1105B1.ADA	P	CA1105B2.ADA	P
CA1105B3M.ADA	P	CA1105B4.ADA	P
CA1105B5.ADA	P	CA1107A0.ADA	P
CA1107A1M.ADA	P	CA1107A2.ADA	P
CA2001H0-B.ADA	P	CA2001H1-B.ADA	P
CA2001H2-B.ADA	P	CA2001H3M-B.ADA	P
CA2003A0M.ADA	P	CA2003A1.ADA	P
CA2004A0M.ADA	P	CA2004A1.ADA	P
CA2004A2.ADA	P	CA2007A0M-AB.ADA	P
CA2007A1-AB.ADA	P	CA2007A2-AB.ADA	P
CA2007A3-AB.ADA	P	CA2008A0M-B.ADA	P
CA2008A1-B.ADA	P	CA2008A2-B.ADA	P
CA3002A0-B.ADA	P	CA3002A1-B.ADA	P
CA3002A2M-B.ADA	P	CA3002A3-B.ADA	P
CA3006C0-B.ADA	P	CA3006C1-B.ADA	P
CA3006C2-B.ADA	P	CA3006C3-B.ADA	P
CA3006C4-B.ADA	P	CA3006C5M-B.ADA	P
CA5002A-B.ADA	P	CA5002B0-B.ADA	P
CA5002B1-B.ADA	P	CA5002B2-B.ADA	P
CA5002B3-B.ADA	P	CA5002B4-B.ADA	P
CA5002B5-B.ADA	P	CA5002B6-B.ADA	P
CA5002B7M-B.ADA	P	CA5003A0-B.ADA	P
CA5003A1-B.ADA	P	CA5003A2-B.ADA	P
CA5003A3-B.ADA	P	CA5003A4-B.ADA	P
CA5003A5-B.ADA	P	CA5003A6M-B.ADA	P
LA3004A0-AB.DEP	N/A	LA3004A1-AB.DEP	N/A
LA3004A2-AB.DEP	N/A	LA3004A3-AB.DEP	N/A
LA3004A4-AB.DEP	N/A	LA3004A5-AB.DEP	N/A
LA3004A6M-AB.DEP	N/A	LA3004B0-B.DEP	N/A
LA3004B1-B.DEP	N/A	LA3004B2-B.DEP	N/A
LA3004B3-B.DEP	N/A	LA3004B4-B.DEP	N/A
LA3004B5-B.DEP	N/A	LA3004B6M-B.DEP	N/A
LA3006A0-AB.ADA	P	LA3006A1-AB.ADA	P
LA3006A2-AB.ADA	P	LA3006A3-AB.ADA	P
LA3006A4-AB.ADA	P	LA3006A5-AB.ADA	P
LA3006A6M-AB.ADA	P	LA3006B0-AB.ADA	P
LA3006B1-AB.ADA	P	LA3006B2-AB.ADA	P
LA3006B3-AB.ADA	P	LA3006B4M-AB.ADA	P
LA3007A0-AB.ADA	P	LA3007A1-AB.ADA	P
LA3007A2-AB.ADA	P	LA3007A3-AB.ADA	P
LA3007A4M-AB.ADA	P	LA3007B0-B.ADA	P
LA3007B1-B.ADA	P	LA3007B2-B.ADA	P
LA3007B3-B.ADA	P	LA3007B4-B.ADA	P
LA3007B5-B.ADA	P	LA3007B6-B.ADA	P
LA3007B7-B.ADA	P	LA3007B8M-B.ADA	P
LA3008A0-AB.ADA	P	LA3008A1-AB.ADA	P
LA3008A2-AB.ADA	P	LA3008A3-AB.ADA	P
LA3008A4-AB.ADA	P	LA3008A5M-AB.ADA	P
LA3008B0.ADA	P	LA3008B1.ADA	P
LA3008B2.ADA	P	LA3008B3.ADA	P
LA3008B4.ADA	P	LA3008B5.ADA	P
LA3008B6M.ADA	P	LA5001A0-B.ADA	P

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LA5001A1-B.ADA
LA5001A3-B.ADA
LA5001A5-B.ADA

P
P
P

LA5001A2-B.ADA
LA5001A4-B.ADA
LA5001A6M-B.ADA

P
P
P

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CHAPTER 11 TEST RESULTS

BB2001A-AB.ADA	P	BB2002A-AB.ADA	P
BB2003A-AB.ADA	P	BB2003B-AB.ADA	P
BB2003C-AB.ADA	P	BB3001A-B.ADA	P
BB3002A-AB.ADA	P	BB3005A-AB.ADA	P
CB1001A-B.ADA	P	CB1002A.ADA	P
CB1003A-AB.ADA	P	CB1004A-AB.ADA	P
CB2004A-B.ADA	P	CB2005A-B.ADA	P
CB2006A-AB.ADA	P	CB2007A-AB.ADA	P
CB3003A-B.ADA	P	CB3004A-AB.ADA	P
CB4001A-AB.ADA	P	CB4002A-AB.ADA	P
CB4003A-AB.ADA	P	CB4004A-B.ADA	P
CB4005A-AB.ADA	P	CB4006A-B.ADA	P
CB4008A-AB.ADA	P	CB4009A-AB.ADA	P

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CHAPTER 12 TEST RESULTS

BC1001A-B.ADA	P	BC1002A-B.ADA	P
BC1008A-AB.ADA	P	BC1008B-AB.ADA	P
BC1008C-AB.ADA	P	BC1009A-AB.ADA	P
BC1011A-AB.ADA	P	BC1011B-AB.ADA	P
BC1012A-AB.ADA	P	BC1013A-B.ADA	P
BC10ABA-B.ADA	P	BC10ABB-B.ADA	P
BC10ACA-B.ADA	P	BC10ADA-B.ADA	P
BC10AEA-B.ADA	P	BC10AEB-B.ADA	P
BC10AEC-B.ADA	P	BC10AED-B.ADA	P
BC10AFA-B.ADA	P	BC10AGA-B.ADA	P
BC1101A-AB.ADA	P	BC1102A-B.ADA	P
BC1103A-B.ADA	P	BC1104A-B.ADA	P
BC1104B-B.ADA	P	BC1106A-AB.ADA	P
BC1107A-B.ADA	P	BC11ABA-B.ADA	P
BC11ACA-B.ADA	P	BC1201A-AB.ADA	P
BC1201B-AB.ADA	P	BC1201C-AB.ADA	P
BC1201D-AB.ADA	P	BC1202A-AB.ADA	P
BC1202B-AB.ADA	P	BC1202C-AB.ADA	P
BC1202D-AB.ADA	P	BC1203A-AB.ADA	P
BC1207A-B.ADA	P	BC1226A-B.ADA	P
BC12ABA-B.ADA	P	BC12ACA-B.ADA	P
BC12ACB-B.ADA	P	BC1303A-AB.ADA	P
BC1303B-AB.ADA	P	BC1303C-AB.ADA	P
BC1303D-AB.ADA	P	BC1303E-AB.ADA	P
BC1306A-B.ADA	P	BC13ABA-B.ADA	P
BC2001A-AB.ADA	P	BC2001B-AB.ADA	P
BC2001C-AB.ADA	P	BC20ABA-B.ADA	P
BC3002A-AB.ADA	P	BC3002B-AB.ADA	P
BC3002C-AB.ADA	P	BC3002D-AB.ADA	P
BC3002E-AB.ADA	P	BC3003A-AB.ADA	P
BC3003B-AB.ADA	P	BC3005A-AB.ADA	P
BC3006A-AB.ADA	P	BC3011B-B.ADA	P
BC3011C-AB.ADA	P	BC3013A-AB.ADA	P
BC3018A-B.ADA	P	BC30ABA-B.ADA	P
BC30ACA-B.ADA	P	BC3101A-B.ADA	P
BC3101B-B.ADA	P	BC3102A-B.ADA	P
BC3102B-B.ADA	P	BC3103A-AB.ADA	P
BC3103B-AB.ADA	P	BC31ABA-B.ADA	P
BC31ACA-B.ADA	P	BC31ADA-B.ADA	P
BC3201A-B.ADA	P	BC3201B-AB.ADA	P
BC3201C-B.ADA	P	BC3202A-B.ADA	P
BC3202B-B.ADA	P	BC3202C-B.ADA	P
BC3203B-B.ADA	P	BC3204A-B.ADA	P
BC3204B-B.ADA	P	BC3204C0-B.ADA	P
BC3204C1M-B.ADA	P	BC3204C2-B.ADA	P
BC3204D-B.ADA	P	BC3204E-B.ADA	P
BC3205A-B.ADA	P	BC3205B-B.ADA	P
BC3205C-B.ADA	P	BC3205D0-B.ADA	P
BC3205D1M-B.ADA	P	BC3205D2-B.ADA	P
BC3205E-B.ADA	P	BC32ABA-B.ADA	P
BC32ADA-B.ADA	P	BC3301A-AB.ADA	P
BC3301B-AB.ADA	P	BC3302A-AB.ADA	P

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BC3302B-AB.ADA	P
BC3304A-AB.ADA	P
BC33ACA-B.ADA	P
BC33AEA-B.ADA	P
BC3401B-AB.ADA	P
BC3402B-AB.ADA	P
BC3403B-AB.ADA	P
BC3404A-AB.ADA	P
BC3404C-AB.ADA	P
BC3404E-AB.ADA	P
BC3405A-AB.ADA	P
BC3405D-AB.ADA	P
BC3405F-AB.ADA	P
BC3501B-AB.ADA	P
BC3501D-AB.ADA	P
BC3501F-AB.ADA	P
BC3501H-AB.ADA	P
BC3501J-AB.ADA	P
BC3502A-AB.ADA	P
BC3502C-AB.ADA	P
BC3502E-AB.ADA	P
BC3502G-AB.ADA	P
BC3502I-AB.ADA	P
BC3502K-AB.ADA	P
BC3502M-AB.ADA	P
BC3502O-AB.ADA	P
BC3503B-B.ADA	P
BC3503D-B.ADA	P
CC1004A-AB.ADA	P
CC1010B-AB.ADA	P
CC1301A-B.ADA	P
CC1304A-AB.ADA	P
CC1307A-AB.ADA	P
CC1310A-AB.ADA	P
CC3004A-B.ADA	P
CC3011A-B.ADA	P
CC3012A-AB.ADA	P
CC3120B-B.ADA	P
CC3203A-B.ADA	P
CC3208B-AB.ADA	P
CC3305B-AB.ADA	P
CC3305D-AB.ADA	P
CC3406B-AB.ADA	P
CC3406D-B.ADA	P
CC3407B-AB.ADA	P
CC3407D-AB.ADA	P
CC3407F-AB.ADA	P
CC3408B-AB.ADA	P
CC3408D-B.ADA	P
CC3504B-B.ADA	P
CC3504D-B.ADA	P
CC3504F-B.ADA	P
CC3504H-B.ADA	P
CC3504J-B.ADA	P

BC3303A-AB.ADA	P
BC33ABA-B.ADA	P
BC33ADA-B.ADA	P
BC3401A-AB.ADA	P
BC3402A-AB.ADA	P
BC3403A-AB.ADA	P
BC3403C-AB.ADA	P
BC3404B-B.ADA	P
BC3404D-AB.ADA	P
BC3404F-AB.ADA	P
BC3405B-B.ADA	P
BC3405E-AB.ADA	P
BC3501A-AB.ADA	P
BC3501C-AB.ADA	P
BC3501E-AB.ADA	P
BC3501G-AB.ADA	P
BC3501I-AB.ADA	P
BC3501K-AB.ADA	P
BC3502B-AB.ADA	P
BC3502D-AB.ADA	P
BC3502F-AB.ADA	P
BC3502H-AB.ADA	P
BC3502J-AB.ADA	P
BC3502L-AB.ADA	P
BC3502N-AB.ADA	P
BC3503A-B.ADA	P
BC3503C-B.ADA	P
BC3503F-B.ADA	P
CC1010A-AB.ADA	P
CC1220A-B.ADA	P
CC1302A-AB.ADA	P
CC1305B-AB.ADA	P
CC1308A-AB.ADA	P
CC2002A-AB.ADA	P
CC3007A-AB.ADA	P
CC3011D-B.ADA	P
CC3120A-AB.ADA	P
CC3125A-B.ADA	P
CC3208A-AB.ADA	P
CC3305A-AB.ADA	P
CC3305C-AB.ADA	P
CC3406A-AB.ADA	P
CC3406C-AB.ADA	P
CC3407A-AB.ADA	P
CC3407C-AB.ADA	P
CC3407E-AB.ADA	P
CC3408A-AB.ADA	P
CC3408C-AB.ADA	P
CC3504A-B.ADA	P
CC3504C-B.ADA	P
CC3504E-B.ADA	P
CC3504G-B.ADA	P
CC3504I-B.ADA	P
CC3504K-B.ADA	P

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CC3601C-AB.ADA

P

CC3602A-AB.ADA

P

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CHAPTER 14 TEST RESULTS

AE2101A-B.ADA	P	AE2101B-B.ADA	P
AE2101C-B.DEP	P	AE2101D-B.ADA	P
AE3101A-B.ADA	P	AE3702A-B.ADA	P
AE3709A-B.ADA	P	BE2101E-B.ADA	P
BE2112A-B.ADA	P	BE2112B-B.ADA	P
BE2112C-B.ADA	P	BE2114A-B.ADA	P
BE2208A-B.ADA	P	BE3001A-B.ADA	P
BE3002A-B.ADA	P	BE3002E-B.ADA	P
BE3105A-B.ADA	P	BE3205A-B.ADA	P
BE3501A-B.ADA	P	BE3606C-B.ADA	P
BE3703A-B.ADA	P	BE3802A-B.ADA	P
BE3803A-B.ADA	P	BE3902A-B.ADA	P
BE3903A-B.ADA	P	CE2102A-B.ADA	P
CE2102B-B.ADA	P	CE2102C-B.ADA	P
CE2102D-B.DEP	N/A	CE2102E-B.DEP	N/A
CE2102F-B.DEP	N/A	CE2102G-B.DEP	N/A
CE2103A-B.TST	P	CE2103B-B.TST	P
CE2104A-B.ADA	P	CE2104B-B.ADA	P
CE2105A-B.ADA	P	CE2106A-B.ADA	P
CE2107A-B.DEP	N/A	CE2107B-B.DEP	N/A
CE2107C-B.DEP	N/A	CE2107D-B.DEP	N/A
CE2107E-B.DEP	N/A	CE2108A-B.ADA	P
CE2108B-B.ADA	P	CE2108C-B.ADA	P
CE2108D-B.ADA	P	CE2108E-B.ADA	P
CE2108F-B.ADA	P	CE2109A-B.ADA	P
CE2110A-B.ADA	P	CE2110B-B.DEP	N/A
CE2111A-B.ADA	P	CE2111B-B.ADA	P
CE2111C-B.ADA	P	CE2111D-B.DEP	N/A
CE2201A-B.ADA	P	CE2201B-B.ADA	P
CE2201C-B.ADA	P	CE2201D-B.DEP	P
CE2201E-B.DEP	P	CE2201F-B.ADA	P
CE2202A-B.ADA	P	CE2204A-B.ADA	P
CE2204B-B.ADA	P	CE2210A-B.DEP	P
CE2401A-B.ADA	P	CE2401B-B.ADA	P
CE2401C-B.ADA	P	CE2401D-B.DEP	P
CE2401E-B.ADA	P	CE2401F-B.ADA	P
CE2402A-B.ADA	P	CE2404A-B.ADA	P
CE2405B-B.ADA	P	CE2406A-B.ADA	P
CE2407A-B.ADA	P	CE2408A-B.ADA	P
CE2409A-B.ADA	P	CE2410A-B.ADA	P
CE3002B-B.TST	P	CE3002C-B.TST	P
CE3002D-B.ADA	P	CE3002F-B.ADA	P
CE3102A-B.ADA	P	CE3102B-B.TST	P
CE3103A-B.ADA	W	CE3104A-B.ADA	P
CE3107A-B.TST	P	CE3108A-B.ADA	P
CE3108B-B.ADA	P	CE3109A-B.ADA	P
CE3110A-B.DEP	P	CE3111A-B.DEP	P
CE3111B-B.DEP	N/A	CE3111C-B.DEP	N/A
CE3112A-B.ADA	P	CE3112B-B.ADA	P
CE3114A-B.ADA	P	CE3114B-B.DEP	N/A
CE3115A-B.DEP	N/A	CE3201A-B.ADA	P
CE3202A-B.ADA	P	CE3203A-B.ADA	P

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CE3206A-B.ADA	P
CE3301A-B.ADA	P
CE3301C-B.ADA	P
CE3303A-B.ADA	P
CE3402A-B.ADA	P
CE3402C-B.ADA	P
CE3402E-B.ADA	P
CE3403B-B.ADA	P
CE3403D-B.ADA	P
CE3403F-B.ADA	P
CE3404B-B.ADA	P
CE3405A-B.ADA	P
CE3405C-B.ADA	P
CE3406A-B.ADA	P
CE3406C-B.ADA	P
CE3407A-B.ADA	P
CE3407C-B.ADA	P
CE3408B-B.ADA	P
CE3409A-B.ADA	P
CE3409C-B.ADA	P
CE3409E-B.ADA	P
CE3410A-B.ADA	P
CE3410C-B.ADA	P
CE3410E-B.ADA	P
CE3411A-B.ADA	P
CE3412A-B.ADA	P
CE3413A-B.ADA	P
CE3601A-B.ADA	P
CE3602B-B.ADA	P
CE3602D-B.ADA	P
CE3604A-B.ADA	P
CE3605B-B.ADA	P
CE3605D-B.ADA	P
CE3606A-B.ADA	P
CE3701A-B.ADA	P
CE3704B-B.ADA	P
CE3704D-B.ADA	P
CE3704F-B.ADA	P
CE3704O-B.ADA	P
CE3706D-B.ADA	P
CE3706G-B.ADA	P
CE3708A-B.ADA	P
CE3804A-B.ADA	P
CE3804C-B.ADA	P
CE3804E-B.ADA	P
CE3804G-B.ADA	P
CE3804K-B.ADA	P
CE3805A-B.ADA	P
CE3806A-B.ADA	P
CE3806D-B.ADA	P
CE3809A-B.ADA	P
CE3810A-B.ADA	P
CE3905A-B.ADA	P
CE3905C-B.ADA	P

CE3208A-B.ADA	P
CE3301B-B.ADA	P
CE3302A-B.ADA	P
CE3305A-B.ADA	P
CE3402B-B.ADA	P
CE3402D-B.ADA	P
CE3403A-B.ADA	P
CE3403C-B.ADA	P
CE3403E-B.ADA	P
CE3404A-B.ADA	P
CE3404C-B.ADA	P
CE3405B-B.ADA	P
CE3405D-B.ADA	P
CE3406B-B.ADA	P
CE3406D-B.ADA	P
CE3407B-B.ADA	P
CE3408A-B.ADA	P
CE3408C-B.ADA	P
CE3409B-B.ADA	P
CE3409D-B.ADA	P
CE3409F-B.ADA	P
CE3410B-B.ADA	P
CE3410D-B.ADA	P
CE3410F-B.ADA	P
CE3411C-B.ADA	P
CE3412C-B.ADA	P
CE3413C-B.ADA	P
CE3602A-B.ADA	P
CE3602C-B.ADA	P
CE3603A-B.ADA	P
CE3605A-B.ADA	P
CE3605C-B.ADA	P
CE3605E-B.ADA	P
CE3606B-B.ADA	P
CE3704A-B.ADA	P
CE3704C-B.ADA	P
CE3704E-B.ADA	P
CE3704M-B.ADA	P
CE3706C-B.ADA	P
CE3706F-B.ADA	P
CE3707A-B.ADA	P
CE3801A-B.ADA	P
CE3804B-B.ADA	P
CE3804D-B.ADA	P
CE3804F-B.ADA	P
CE3804I-B.ADA	P
CE3804M-B.ADA	P
CE3805B-B.ADA	P
CE3806C-B.ADA	P
CE3806E-B.ADA	P
CE3809B-B.ADA	P
CE3901A-B.ADA	P
CE3905B-B.ADA	P
CE3905L-B.ADA	P

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CE3906A-B.ADA	P
CE3906C-B.ADA	P
CE3906E-B.ADA	P
CE3907A-B.ADA	P
EE3102C-B.ADA	P

CE3906B-B.ADA	P
CE3906D-B.ADA	P
CE3906F-B.ADA	P
CE3908A-B.ADA	P

Delivery-By: Network Server.Daemon (GOOS@USC-ECLB.ARPA)
 Date: Friday, 20 July 1984 10:23 edt
 From: GOOS at USC-ECLB
 To: Goodenough at USC-ISI
 cc: Clausen.IABG at MIT-MULTICS

Attm. 1

Subject: ACVC Test

Problems in ACVC-tests

- depending in the strategy of storage allocation for tasks some test cases containing nested tasks may lead to storage errors. We suggest to allow the insertion of length clauses specifying the storage size of the tasks.
- The names PKG, P, F are used more than once in the ACVC-tests (CA1002A, CA1003B, CA1004, CA1005, CA3002A). If the complete set is being compiled before execution using one library this means that recompilations are made. Some tests cannot be executed later one. It would be very simple to replace such plain names. This would increase orthogonality of the test set without removing any test goal.

Errors in ACVC-test

- Test C95009A may lead to a deadlock if the assignment AT2 := NEW T2T is executed after the activation of the dynamically created task and the subsequent rendezvous. The selected component AT2.ALL in T1 will then raise a constraint error and T1 is completed (Note that already the elaboration of the right hand side of the assignment causes the task activation).

 --- (6) ---

#1 (14 lines in body):

Delivery-Date: 23 July 1984 16:30 edt
 Delivery-By: Network Server.Daemon (GOODENOUGH@USC-ISI.ARPA)
 Date: Monday, 23 July 1984 13:21 edt
 From: John B. Goodenough <GOODENOUGH at USC-ISI>
 Subject: Re: ACVC Problems
 To: GOOS at USC-ECLB
 cc: Goodenough at USC-ISI, Clausen.IABG at MIT-MULTICS
 In-Reply-To: (Message from "GOOS@USC-ECLB.ARPA" of Fri 20 Jul 84 07:14:51-PI)

Problem 1: It would seem to me to be an allowable test modification to add a length clause that ensured STORAGE_ERROR did not arise for nested task tests.

Problem 2: The names PKG, P, F have been replaced in version 1.4 and later versions of the ACVC (they are now used only once, I believe, and this occurrence will be removed in 1.6).

Problem 3: I think your point is that AT2 need not be assigned a value before execution of T1 can proceed to the point where AT2.all is executed. Your analysis seems to be correct. We will modify this test.

#2 (12 lines in body):
 Delivery-By: Network Server.Daemon (GOOSEUSC-ECLB.ARPA)
 Date: Thursday, 23 August 1984 05:18 edt
 From: GOOS at USC-ECLB
 Subject: ACVC-TEST.C43206A
 To: Knapper at USC-ECLB
 cc: Clausen.IABG at MIT-MULTICS

Attm. 2

p. 1

Subject: ACVC-tests

In test C43206A the evaluation of the length of the null
 array with range 5..integer'first (needed for assignment
 check) yields a numeric error if it is computed as maxi-
 mum (0, upper_bound - lower_bound +1). We would appreciate
 this behavior to be allowed for validation instead of ge-
 neration worse code for non-pathological programs. Do you
 agree that the test should allow NUMERIC_ERROR to be raised?

---(2)---

#1 (26 lines in body):
 Delivery-Date: 20 September 1984 04:09 edt
 Date: Thursday, 20 September 1984 04:08 edt
 From: Clausen
 Subject: fast reaction team
 To: Knapper at USC-ECLB
 cc: Clausen.IABG

Bob,

following there are two disputed ACVC-tests

1. C42005A checks that a null string with upper bound
 integer'pred (integer'first). Although 5.5.5/9 states
 that (at least) constraint error must be raised in
 this case, the implementation considered uses the
 predefined numeric operator "-" to evaluate this
 construct and raises numeric error according to
 11.1/6. The demand to raise constraint error in
 this case would force an implementation to perform
 an extra check for integer'pred (...) instead
 of leaving it to the execution of predefined numeric
 operators.
2. AD5007D applies the attributes 'position, 'first bit
 and 'last bit to renamed objects. LRM 15.7.2/7-10
 states that these attributes are applied to names of
 the form r.c where c is a component of a record r.
 There is the believe that the fast contradicts to this.
 (See also A1-00258/01)

hope the team reacts fast.

Regards, Helmut

---(1)---

Attm. 2 p.2

#1 (11 lines in body):
 Delivery-Date: 9 November 1984 11:01 est
 Delivery-By: Network Server.Daemon (KNAPPER@USC-ECLB.ARPA)
 Date: Friday, 9 November 1984 11:00 est
 From: KNAPPER at USC-ECLB
 Subject: re: disputed tests
 To: Clausen at MIT-MULTICS
 cc: Knapper at USC-ECLB, Mathis at USC-ECLB, Kramer at USC-ECLB,
 Knooppa at WPAFB-JALCF, Clausen.IABG at MIT-MULTICS
 In-Reply-To: <841109081025.147437@MIT-MULTICS.ARPA>

Helmut:

All three tests are withdrawn. The last test C43206A caused a split decision. Since this test and others like it need to be addressed by the ADA Board, it is withdrawn only for Karlsruhe.

I hope this clears up any problems and the report can be finished. If there are any problems noted in the report, I would appreciate it if you could net them to me early. Thank you.

Bob K
 ---(1)---

END

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